

**Purdue University Biomedical Engineering Society
Chapter Development Report
2019 - 2020**

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Executive Summary

For over ten years, 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 the yearly Industrial Roundtable Dinner, Fall Midwest Speaker Exchange, and Spring Research Symposium. BME Bytes, a bi-weekly professional seminar series, provides opportunities for undergraduate and graduate students to interact and gain insight into the world of academia. Our BMES chapter is actively involved in the greater Lafayette community. Examples include assisting the local animal shelter and hosting educational activities with Coding for Kids, our local STEM center (Imagination Station), and West Lafayette Public Schools. In combination with various social and mentorship events, this year marked a substantial increase in opportunities for students to develop their skills as biomedical engineers and cultivate collaborations with industry partners, faculty, staff, and peers.

To the BMES Student Award Committee Members:

This year marks the 13th anniversary of the Purdue University BMES Chapter. 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. More than 20 students are paid members of the BME National Society and benefit from participation at the BMES national meeting and the advantages of professional membership in the society. The following report outlines the continuation and development of several highly successful events in the undergraduate and graduate chapters.

This year, the undergraduate chapter continued to nurture relationships and introduce new opportunities. The annual BMES Industrial Roundtable Banquet consisted of 33 undergraduate students and 14 company representatives from 7 companies. This event promoted professional networking in a relaxed environment compared to the job fair, allowing small groups of students to directly interact with hiring representatives. The chapter also held an incredible mentorship program in which upperclassmen were able to share professional experiences and give advice to incoming students. Plant tours with companies such as Cook Biotech were also provided, to immerse students in the industry experience. Lastly, community service events supported the greater Lafayette area through the Coding for Kids program and volunteering with the local animal shelter.

Similarly, the graduate chapter has created opportunities for professional, social, and personal growth within the BMEGSA. Major events included the GitHub workshop, Halloween Pumpkin Carving Contest, Mindfulness Meditation, Step Contest, many cultural celebrations, and the Global Get-Down Celebration. Though the annual Spring Research Symposium was cancelled due to COVID-19, other professional development opportunities such as the GitHub workshop, journal clubs, and the Coding Collab provided students the opportunity to help each other expand their skills and knowledge. Additionally, the BMEGSA partners with Imagination Station, West Lafayette Public Schools, and Lafayette Regional Science and Engineering Fair to host science education booths and provide prizes for the Lafayette regional science fair. Finally, the BMEGSA also coordinates many diverse social events, including Korean, Chinese, and Russian inspired events, to promote comprehensive engagement within the chapter.

Connecting students with faculty and research is a central focal point of Purdue's BMES chapter. BME Bytes, a bi-weekly seminar session that invites a graduate student to present their research to all undergraduate students in BME over lunch, and many other inter/intra departmental programs highlight the organization's commitment to BMES's goals, providing opportunity for the students to gain insight into the world of academia and life as biomedical engineers. 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 engagement of our Purdue University student members.

Sincerely,

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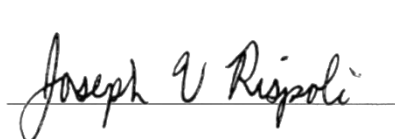


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I. ADMINISTRATION REPORT

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 began their term in the fall semester. Additionally, two sophomore students are selected through an application process to represent their sophomore class. These members hold a weekly meeting to discuss upcoming events and opportunities.

Graduate BMEGSA Chapter

The members of the graduate executive board are elected in the spring semester by the Purdue Biomedical Engineering graduate student body through both self and peer-based nominations. The members immediately begin their term. Some offices, like that of the first-year office, are filled as the incoming class joins the department in the fall semester and others are filled upon vacancies. These members hold a monthly meeting to discuss upcoming events and opportunities.

A. OFFICERS

Undergraduate Purdue BMES Chapter			
Position	Name	Email	Officer Responsibilities
President	Emma Simmons	simmone@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	Eva Yezerets	eyezeret@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	Charles Martin	mart1372@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	Sahar Ibrahim	sibrahi@purdue.edu	<ul style="list-style-type: none"> - Keep minutes of all cabinet meetings - Submit a year-end Chapter Development Report - Promote and keep contact with National Society - Keep inventory for organization

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Director of Public Relations	Victoria Ochs	vochs@purdue.edu	<ul style="list-style-type: none"> - 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	Lakmini Wilson	wilsonlj@purdue.edu	<ul style="list-style-type: none"> - 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 - Create and manage a committee to assist in execution of activities, if needed
Director of Social Media	Shaheryar Khan	khan190@purdue.edu	<ul style="list-style-type: none"> - Upkeep the chapter's social media accounts - Promote chapter events and activities - Upkeep of the BMES chapter website
Director of Professional Development	Elizabeth Wakelin	ewakelin@purdue.edu	<ul style="list-style-type: none"> - Actively pursue opportunities for industries, graduate students, professors, and entrepreneurs to interface on a personal basis with BMES members - Organize and host IR Networking Reception - Create and manage a committee to assist in execution of activities, if needed
Director of Programming	Nicolet Elsbury	nelsbur@purdue.edu	<ul style="list-style-type: none"> - Direct and support activities put on by BMES - Create and manage a committee to assist in execution of activities, if needed - Hold fundraisers as needed
Sophomore Representatives	Max Giesemann	mgiesema@purdue.edu	<ul style="list-style-type: none"> - Assist officers with tasks and chapter events - Upkeep the chapter's BMES website to promote chapter events and activities - Communicate chapter events with sophomores
	Brianna Shannon	shannob@purdue.edu	

Graduate BMEGSA Chapter

Position	Name	Email	Officer Responsibilities
President	Mazin Hakim	mhakim@purdue.edu	<ul style="list-style-type: none"> - Preside over and organize both general body meetings and executive board meetings - Represent BME graduate students within the department
Vice President (Fall & Spring)	Sarah Libring	slibring@purdue.edu	<ul style="list-style-type: none"> - Oversee meetings in the president's absence - Order food for general body meetings
	Laura Roa	lroa@purdue.edu	

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Treasurer	Paula Sarmiento	psarmien@purdue.edu	-Create budget, oversee disbursement and procurement of funds -Coordinate grant applications -Update and make changes to budget
Secretary	Kelsey Hopkins	hopkink@purdue.edu	-Keep and distribute executive board meeting minutes -Assist in CDR completion
Webmaster	Alexander Ocken	aocken@purdue.edu	-Publicize events on GSA pages -Promote events by making flyers
PGSG Senator (Fall & Spring)	Hannah Cebull	hcebull@purdue.edu	- Represent the department in the Purdue Graduate Student Government - Disseminate opportunities and events stemming from PGSG to the biomedical engineering department
	Catherine Weathered	weath11@purdue.edu	
GSAC Representatives (Fall & Spring)	Elizabeth Niedert	eniedert@purdue.edu	- Represent department in the Graduate Student Advisory Council -Relay announcements from GSAC to executive board members
	James Nolan	nolan6@purdue.edu	
	Angel Enriquez	aenrique@purdue.edu	
	Mazin Hakim	mhakim@purdue.edu	
Social Chairs	Sean Rothenberger	srothenb@purdue.edu	-Organize social events for graduate students and potential students during recruitment and orientation -Upkeep social media sites
	Anastasiia Vasiukhina	avasiukh@purdue.edu	
Outreach Chair	Elizabeth Niedert	eniedert@purdue.edu	- Organize engagement and outreach opportunities with the Greater Lafayette community while encouraging scientific advocacy and education within the community
Diversity Chairs	Katie Leyba	leybak@purdue.edu	- Organize events to celebrate the department's diversity
	Haesoo Moon	moon115@purdue.edu	
Professional Development Chairs	Rav Singh	singh415@purdue.edu	-Coordinate professional development events like symposiums, speaker exchanges, and workshops -Network with connections, speakers, and university resources to host events
	Matthew Thompson	thompsmj@purdue.edu	

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Special Programs Chairs	Apekshya Chhetri	chherti@purdue.edu	-Direct the Purdue Initiative Program -Maintain contact with other departments -Coordinate and support fundraisers
	Elly Lambert	lamberte@purdue.edu	
BMES/GSA Liaison	Jessica Ma	ma272@purdue.edu	- Coordinate events between the Purdue undergraduate (BMES) and graduate (BMEGSA) chapters
Summer Seminar Chairs	Kelsey Hopkins	hopkink@purdue.edu	- Coordinate summer seminar presentations
	Agudemu Borjigin	aagudemu@purdue.edu	
1st Year Representative	Laura Roa	lroa@purdue.edu	- Represent graduate first-years
IUPUI Representative	Nathaniel Smith	smit3254@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

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, 35% of Purdue BMES and 50% of BMEGSA are national members of the Biomedical Engineering Society. The names of the board members that are national members, as well as their National BMES ID numbers are listed below.

Name	Email	Position	National ID Number
Emma Simmons	simmone@purdue.edu	BMES President	4021766
Eva Yezerets	eyezeret@purdue.edu	BMES Vice President	4020238
Lakmini Wilson	wilsonlj@purdue.edu	BMES Director of Mentorship	4020278
Kelsey Hopkins	hopkink@purdue.edu	BMEGSA Secretary/Summer Chair	4013058
Alexander Ocken	aocken@purdue.edu	BMEGSA Webmaster	2351372

C. EXECUTIVE AND GENERAL BODY MEETINGS

Undergraduate Purdue BMES Chapter

Executive board members attend a meeting once a week to discuss upcoming events and opportunities for the Purdue Biomedical Engineering community. Each executive board member has a role and tasks to complete each week.

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Example Agenda:

Agenda 9/1/19

President (Emma)

- PEPC Meeting
 - BSN- boiler student network, mentorship program
 - Possibly providing future funding or access to corporate sponsors
 - Etiquette Dinner - couple spots for each org, networking and how to act info
 - Oct 19 event for Engineering projects w kids grades K-8
- Engineering barn dance/formal
 - Helping plan but not pay, they need time commitment for planning, advertising ticket sales and setting up/taking down the day of the event
- Summary of meeting w Brian Knoy
 - Ask for IR banquet sponsors after this one
 - Have them sponsor Warsaw tour and similar events
 - Possibly have sponsor/donations for Relay

VP (Eva)

- Sophomore Rep Application updates
 - Notes: 5 applications complete, 2 weeks until the deadline
- Community service -updates?
 - Miami Elementary
 - Ms. Croy's High School club at West Lafayette High School
 - Notes: Contacted Timmy Global Health (no response yet on collaborations); contacted Purdue Engineering Outreach - meeting being scheduled for this week to discuss joint volunteering opportunities

Treasurer (Charlie)

- Updates on funding?
- PESC Merit Fund (early Oct)
 - Collaborate w GSA and AEMB
- SOGA Period 2 (Oct)
- Look for more grants to apply to
- Update on TooCool Store Front/preorders

Secretary (Sahar)

- Weekly Meeting Notes - fwd to Rispoli and Corey
- Manage Student Lounge and Calendar
- Go through student lounge and inventory what we have - make a spreadsheet in google folder

Director of Programming (Nicolet)

- Sports events and/or Intramural teams?
- Assist Liz with IR Dinner if necessary
- Bar Crawl (Oct/Nov)

Director of Mentorship (Lucky)

- What do you need for callouts?
 - Chocolate syrup
 - Caramel syrup
 - Sprinkles
 - M & M's
- Ideas for meetings
 - Start off with a basic overview of the whole program
 - Make everyone introduce themselves to the whole group
 - Mentors and Mentees can pair up and introduce themselves
 - Fun group activity / Ice breaker
- Update on numbers of mentors/mentees?

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Director of Professional Development (Liz)

- IR Dinner Updates
- Resume workshop before IR- what do we need
- Tours in the fall - CBI

Director of Public Relations (Tory)

- Send BMES Emails to students and faculty
- expanding name tags/updates
- Apparel & Swag
 - T shirt orders (oct) distribution (nov)
 - Bar Crawl Shirt Design

Director of Social Media (Shaheryar)

- Manage FB page, Instagram, and website (for now)
 - Started a new Twitter as another resource if students want to follow it
 - Goal is to get 30 students to follow it for now
- Post info about upcoming events
 - Will post poster into all GroupMes this week about the resume workshop
 - Also, will post Mentorship poster as well to all social media

Graduate BMEGSA Chapter

BMEGSA executive board members meet once per month or additionally when necessary. The board has grown from last year to include another sub-committee for the IUPUI branch of our chapter as well as to include more co-chair positions. The new role defined for the IUPUI representative has allowed us to coordinate event planning and execution with the biomedical engineering students located in Indianapolis. The increased number of co-chairs on our executive board has also made event planning and logistics for executive board involvement easier. Three positions exist on our executive board to represent BME graduate students at the college and university level: the Purdue Graduate Student Government representatives and the Graduate Student Advisory Council representative. The executive board is happy to report the continued success of the BMEGSA, a success that is not only reflected in the student attendance at our monthly meetings but also by the turn-out at the events that we have held this year.

Example Agenda:

Start time: 1:35 pm Thursday February 20, 2020

MJIS 2001

Agenda Items:

1. BMES/BMEGSA Team Store Fundraiser
 - Sell Weldon BME Logo items online
 - Joint account with Brightman for BMEGSA and BMES – split between the two
 - Probably will use this money for collaborative events between us and BMES
 - Probably won't get a lot of money from this though. Get 25% of revenue after tax and Purdue might take another cut
2. PGSG GSOGA Grant
 - Did not get the grant because did not give enough information about existing budget apparently
 - Can modify current budget to fit in some of the events planned for this grant anyway
3. BMEGSA Branding from Korina
 - Have new Purdue logos – use these when needed. Will be on the drive
 - Korina also sent out email with logo and powerpoint
4. Subcommittee Updates
 - Treasurer
 - Send your event reports to Paula and Mazin

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- Even if no funds used, we need a record of the event
- Social
 - Recruitment
 - Tonight is first night
 - Science on Tap 6-7:30 pm
 - Game night at Merlin's beard – right after Science on Tap, walk over after
 - Merlin's Beard reserved starting from 7:30 but event is officially from 8-10 pm
 - Got boneless wings and fries for appetizers tonight
 - Tomorrow is night out at the Vault at 9 pm, will have quarters for people to play pool
 - Update events on budget spreadsheet – green done, red cancelled, and white left to do so we can plan for the rest of the semester
- Prof Development
 - Symposium
 - Dr. Kevin Otto accepted invitation to be keynote speaker – former Purdue faculty
 - Joe Trebley, Kevin Meyer, Loran Solorio, and Kelsey Bayer invited as panelists
 - Will be April 9th but still working out details of schedule
 - Trying to figure out poster session logistics
 - Speaker Exchange
 - Exchange with University of Michigan
 - Orlando is going there to speak
 - We need to pick Michigan student to speak here on March 13th (2001 is reserved)
 - Only have 1 abstract submitted from them so far – deadline is tomorrow for them to submit
 - If more submitted, will send out a poll to pick best abstract to invite
 - If only 1 submitted, will have that person as our speaker
- Outreach
 - Plenty of judges for Science Fair
 - Lots of volunteers signed up for activities on spreadsheet – just need more on April 11
 - Location of Service Learning grant funds? Elizabeth has emailed a lot of people but they are still trying to locate this. Need to find the money to plan events
- Diversity
 - Graduate Women's Gathering
 - Inspired Fire is \$18/person so can have an event there
 - Limit event to set number of people due to budget constraints. Will send out poll for headcount
 - Event maybe April 10th.
 - Make sure to invite women in Indy (contact Nate)
 - Indy trip in March
 - Ramadan-a-thon collaborate with BMES. Late April
- Special Programs
 - \$400 left and will divert funds to Indy Symphony event
 - Still looking at options for best deals on symphony
 - Give remaining funds for mental health coffee break for IUPUI students to Nate. We can tell Nate that he has this money now to start planning IUPUI coffee break
- Undergrad Liaison
 - Ramadan-a-thon – Jessica is in communication with undergrads.
- 1st Year Rep
- GSAC/ PGSG Rep
 - Overpayment issue: When switched over to biweekly pay last year, Purdue had problems with underpaying or overpaying grad students.
 - For overpaid students, Purdue wants the money back even though it was their mistake and some students don't have the money to give back
 - But Associate Dean can't do anything unless we have proof it's a serious issue that affects lots of graduate students
 - GSAC only has anecdotes, but if we want to have something done about it, we need a survey and evidence.
 - GSAC wants to create standardized survey to get evidence
 - Catherine thought PGSG had already done something like this and had reached the verdict that they couldn't do anything?
 - Try to see what PGSG has done
 - Purdue also has Legal Services where you can consult lawyers for free so maybe bring them in

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- Mazin will send email to BME students just to gauge interest and see if anyone has been affected by this issue
- PGSG
 - Passed undergrad motion requiring professors to put information about CAPS in syllabus
 - CAPS is short-staffed. Can only visit 12 times per year

5. March GBM

- Tuesday March 3rd, MJIS 2001, 12-1 pm
- Are there diversity/holidays to combine with this? Not doing Maslenitsa. Maybe do St. Patrick's Day celebration and make a powerpoint about the origins of the holiday. Check out Nine Irish for food and get a quote for 25 and 35 people just to have two. Can also supplement with pizza
- Have at least \$250 set aside for GBM
- Upload slides to Kelsey's google slide for GBM. Do not send to Mazin
- Please upload slides by Feb 28th

6. Next Exec Board Meeting

- March 26th, MJIS 3041, 1:30 – 2:30 pm

7. Open discussion

- Mention parking resolution – adding 73 new spaces – at next GBM

Adjournment: 2:12 pm Thursday February 20, 2020

II. TREASURY REPORT

Undergraduate Purdue BMES Chapter

The treasury report shown below details the funding state of the undergraduate BMES chapter. This semester, the chapter had a total of \$121.33 in surplus revenue for the semester and in total brought in a total revenue of \$246.94. Most of the revenue came from two fundraising events, such as the Industrial Roundtable Annual Networking Dinner. Most of the expenses this semester went toward supporting the mentorship meetings as many other events had minimal expenses to the chapter associated with them.

Balance Sheet

Purdue University BMES 2019-2020 School Year	
Beginning Balance	\$579.33
Withdrawals	-\$125.61
Deposits	\$246.94
Current Balance	\$700.66

The breakdown of the revenue and expenses are shown in the table below.

Date	Source	Revenue/Expenses
6/1/2019	Starting Balance as of 6/1/2019	\$579.33
6/3/2019	Sales Tax Expense	-\$0.46
6/30/2019	Financial Service Fee Expense	-\$18.45
6/30/2019	Checking Interest	\$3.11
9/17/2019	Industrial Roundtable Networking Dinner	\$180.00
9/23/2023	Industrial Roundtable Networking Dinner	-\$4.99
10/10/2019	Mentorship Meeting 1 Expenses	-\$26.82
10/24/2019	Mentorship Meeting 2 Expenses	-\$7.36
11/12/2019	BMES Shirt Sales	\$63.83
12/5/2019	Mentorship Meeting 3 Expenses	-\$22.49

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12/5/2019	Fuel for Finals Supplies	-\$39.70
2/28/2020	Mentorship Meeting 4 Expenses	-\$4.34
3/31/2020	MVR Fees	-\$1.00

Graduate BMEGSA Chapter

For the 2019-2020 academic year, the BMEGSA’s budget was discussed with members of the executive board and then approved by Andrew Brightman, BME’s Graduate Programs Director. We received \$7,000 in funding from our department, \$2000 from the Office of Graduate Education in committee funding and to address the CoE theme of Mental Health this year. We applied for and received an additional grant to supplement our departmental funding; this totaled \$1500 and supported our professional development events from the Purdue Graduate Student Organization Grant Allocation and Purdue Graduate Student Government Event Co-Sponsorship. We also applied and received the Service-Learning Grant, which 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.

This year, we budgeted our spending to include:

1. Professional Development (BMEGSA/PIIN Symposium, Big10 speaker exchange, Skills Workshops, BME Bytes Seminar, industry immersion, etc.): \$5000
2. Social Events (Orientation, recruitment, ice-cream socials, Global Get Down, etc.): \$1260
3. Diversity Events (Celebration of cultural holidays, Women in BME gatherings, visits to cultural spaces as museums, etc.): \$1710
4. Outreach Events (Imagination Station demonstrations, awards for local science fair participants, etc.): \$1850
5. Orientation Events (Trivia night, bonfire event, trip to Indiana Dunes, etc.): \$670
6. Mental Health Initiatives (Time management workshops, physical health awareness, IM participation, etc.): \$1000

Balance Sheet

Two BMEGSA accounts are maintained by the Chapter Treasurer with oversight from the department and Purdue’s business offices. Deposits into our account included financial support from the Purdue University Biomedical Engineering department, Purdue College of Engineering, Purdue Office of Engagement, Purdue Graduate Student Government, BMES National, and apparel sales.

Purdue University BMEGSA 2019-2020 School Year	
Beginning Balance	\$2,955.10
Withdrawals	-\$7,174.14
Deposits	\$12,702.20
Current Balance	\$8,483.16

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Date	BOSO Account		BME Account		Description
	Amount	Transaction	Amount	Transaction	
05/28/19	\$1,709.81	Baseline	-	-	Initial Amount
05/28/19	-\$41.04	Expense	-	-	Summer Seminar Refreshments to Kelsey Hopkins
05/29/19	-	-	\$1,245.29	Baseline	Initial Amount
05/29/19	\$122.00	Income	-	-	4er Zip TooCool Transfer + Tax
06/03/19	\$91.20	Income	-	-	4er Zip TooCool Transfer + Tax
06/03/19	-\$69.80	Expense	-	-	Tax deduction of TooCool May Sales
06/11/19	\$30.50	Income	-	-	4er Zip TooCool Transfer + Tax
06/17/19	\$91.50	Income	-	-	4er Zip TooCool Transfer + Tax
06/30/19	-\$16.73	Expense	-	-	Checking Interest
06/30/19	-\$36.54	Expense	-	-	Financial Service and CC fees
07/01/19	-\$14.00	Expense	-	-	Tax deduction of TooCool June Sales
07/01/19	-	-	-\$270.00	Expense	BBQ Dr. Solorio Mentor Award
07/09/19	\$395.00	Income	-	-	4er Zip in Person Sales
07/11/19	-\$34.51	Expense	-	-	Summer Seminar Refreshments to Kelsey Hopkins
08/02/19	-\$28.84	Expense	-	-	Tax deduction of TooCool July Sales
08/12/19	-	-	-\$211.00	Expense	General Body Meeting Lunch
08/13/19	-	-	-\$150.00	Expense	Sargent Preston's (orientation)
08/14/19	-	-	-\$106.50	Expense	Stacked Pickle (orientation)
08/15/19	-	-	-\$108.21	Expense	Bonfire (orientation)
08/24/19	-\$21.44	Expense	-	-	Dunes Trip to Mazin
09/03/19	-\$45.00	Expense	-	-	Intramural Registration to Tyler
09/03/19	-	-	-\$90.63	Expense	GitHub Workshop
09/03/19	\$122.00	Income	-	-	4er Zip TooCool Transfer + Tax
09/05/19	-\$0.50	Expense	-	-	Postage Expense
Unknown	-	-	\$7,000.00	Income	BME Funding
08/28/19	-	-	-\$3,000.00	Expense	San Diego Trip
09/18/19	-\$95.10	Expense	-	-	Tamales & Decorations to Katie Leyba
09/18/19	-	-	-\$74.29	Expense	Other Food Independencia event

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09/30/19	\$2,000.00	Income	-	-	Grant from College of Engineering
10/02/19	-\$11.31	Expense	-	-	Postage
10/27/19	-\$58.24	Expense	-	-	Outreach Event
10/28/19	-\$222.37	Expense	-	-	Tihar Event
10/31/19	-\$19.24	Expense	-	-	Candy for Pumpkin Carving Contest
10/31/19	-	-	-\$16.17	Expense	Adjustment for tips used with card
10/31/19	-	-	-\$70.53	Expense	Extra pizza for Tihar
11/01/19	-	-	-\$48.85	Expense	Appetizers for Halloween Bar Crawl
11/08/19	\$130.00	Income	-	-	4er Zip in Person Sales
11/12/19	-\$196.27	Expense	-	-	Panera for Meditation Session
11/20/19	\$20.00	Income	-	-	Transfer from Pulse GSO?
12/01/19	-\$8.99	Expense	-	-	Tax deduction of in person Sales
12/01/19	-	-	-\$220.00	Expense	December Potluck + Hot Coco
12/05/19	-	-	-\$29.68	Expense	Hot Coco Event
12/09/19	-\$103.77	Expense	-	-	Step Contest Prices
01/27/20	-\$118.00	Expense	-	-	Intramural Registration to Tyler
01/29/20	-\$150.00	Expense	-	-	ECEGSA Transfer for Global Get Down
02/03/20	-\$195.03	Expense	-	-	Outreach Event
02/04/20	-	-	-\$91.68	Expense	February General Body Meeting
02/05/20	\$1,200.00	Income	-	-	PGSG Symposium Grant
02/24/20	-\$200.79	Expense	-	-	Outreach Events
02/24/20	-\$82.27	Expense	-	-	BME Bytes Pizza
02/25/20	-\$300.09	Expense	-	-	Recruitment Game Night at Merlin's Beard
03/03/20	-	-	-\$91.68	Expense	March General Body Meeting
03/03/20	-	-	-\$12.24	Expense	March GBM _ St Patrick's Decorations
03/03/20	-\$18.98	Expense	-	-	March GBM_ St Patrick's Cookies
03/03/20	-\$0.59	Expense	-	-	Postage
03/09/20	-\$47.63	Expense	-	-	Outreach Activity
03/09/20	-\$44.61	Expense	-	-	BME Bytes Pizza
	-	-	\$1,500.00	Income	Service-Learning Grant
03/14/20	-\$255.00	Expense	-	-	Cancellation Fee for Flight Dr. Otto
03/10/20	-\$146.00	Expense	-	-	Intramural fees Tyler Diorio Pending (COVID19)
TOTAL	\$3,329.33		\$5,153.83		

III. CHAPTER ACTIVITIES

This year, there were several new events as well as a replication of previous successful events. BMES worked on improving and enhancing previous events such as those surrounding Industrial Roundtable and the Mentorship Program, to improve Purdue BME students' experiences. However, sadly, due to the unplanned arrival of COVID-19, it was not possible to implement many future planned events and ideas. This resulted in a shortage of events for the current year.

Industry and Professional Development Activities

Undergraduate

- Industrial Roundtable Workshop (Fall)
- Industrial Roundtable Annual Networking Dinner (Fall)
- Cook Biotech Industry Tour (Fall)

Graduate

- GitHub Workshop (Fall)
- Faculty Potluck (Fall)
- BME Bytes (Spring)
- BME-PIIN Spring Interdisciplinary Research Symposium (Spring, postponed)

Social Activities

Undergraduate

- Coffee and Convos (Spring)

Graduate

- Sgt. Preston's wings and appetizers (Fall)
- Trivia Night (Fall)
- Bonfire (Fall)
- Dunes (Fall)
- Halloween Bash and Pumpkin Carving Contest (Fall)
- Hot Chocolate Social (Fall)
- Intramural Sports (Fall)
- Merlin's Beard (Spring)
- Night Out at the Vault (Spring)
- Global Get Down (Spring)
- Movie Nights (Spring)
- End of Semester Celebration (Spring, postponed)
- Pizza making party (Spring, postponed)
- Faculty Mentor Award BBQ (Summer, postponed)

Inter-chapter Activities

Graduate

- Midwestern Speaker Exchange (Spring, cancelled)

Outreach Activities

Undergraduate

- Natalie's Second Chance Volunteering (Fall & Spring)
- Coding for Kids (Spring)

Graduate

- Imagination Station Halloween Event (Fall)
- Imagination Station Candy DNA (Spring)
- Imagination Station Magnetic Putty (Spring)
- Imagination Station Conductive Paint (Spring)
- Science Fair Prizes (Spring)

Mentoring Activities

Undergraduate

- Mentorship Meetings (Fall & Spring)
 - Ice Cream Social (Fall)
 - Halloween Theme (Fall)
 - Thanksgiving Theme (Fall)
 - Mentorship Spotlight (Spring)

Graduate

- Lava Lamps (Fall) West Lafayette Elementary School
- Tecumseh Middle School, South Putnam High School (Spring, Postponed)

Other Initiatives and Activities

Undergraduate

- Boiler Bash (Fall)
- Fuel for Finals (Fall)

Graduate

- IUPUI Connectivity
 - Coffee Break (Fall & Spring)
 - Indy Symphony (Spring, Postponed)
 - Newfields Museum (Spring, Postponed)
- Diversity and Inclusion
 - Dia de la Independencia (Fall)
 - Tihar Celebration (Fall)
 - St. Patrick's Day Celebration (Spring)
- GSAC
 - Beyond Coffee (Fall)
- Outstanding Mentor Cookout (Summer, Postponed)
- Special Programs
 - Step Contest (Fall)
 - Mental Health Yoga (Fall, Spring, Postponed)

A. INDUSTRY AND PROFESSIONAL DEVELOPMENT ACTIVITIES

The Purdue BMES chapter aims to prepare students for careers after graduation by providing opportunities to practice professional skills, inviting industry professionals to discuss their post-graduation experiences, and coordinating tours for career options across the country. Through these events, our BMES chapter has sought to make a large impact on the biomedical engineering community at Purdue by enhancing student exposure to professional opportunities.

Undergraduate Purdue BMES Chapter

(1) Industrial Roundtable Workshop

The Industrial Roundtable (IR) is a large campus-wide recruitment at Purdue University where industry representatives come to speak with undergraduates about employment opportunities at their respective companies. The IR Workshop aims to prepare students for these career opportunities, through professional advice from upperclassmen. Specifically, undergraduate students are given feedback on their resumes, elevator pitches, and general information regarding interacting with recruiters. This event encourages sharing of professional experiences to generate successful experiences at IR.

Resume Workshop

September 6th, 2019

15 Attendees

(2) Industrial Roundtable Annual Networking Dinner

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.

IR Networking Dinner

September 10th, 2019

33 Attendees

(3) Cook Biotech Industry Tour

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

Industry Tour

November 23rd, 2019

15 Attendees



Graduate BMEGSA Chapter

(1) GitHub Workshop

Dr. Else Pienaar led a presentation and interactive discussion on source control - the practice of tracking and managing changes to code, ensuring that all developers for a project are working on the right version of source code. This topic was relevant to many BME students, who found this presentation useful to their computation research - especially Dr. Pienaar’s guidance on the use and guiding principles behind Github and git controls.

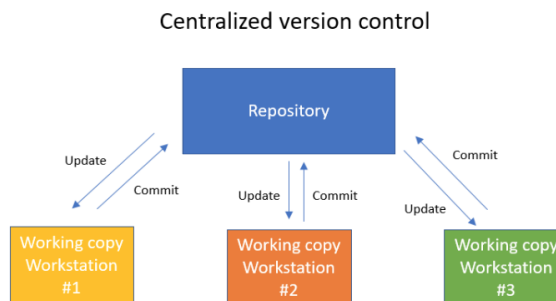
Source Control Workshop

September 3rd, 2019

14 Attendees

Version control using Git and GitHub

Elsje Pienaar
Assistant Professor
Weldon School of Biomedical Engineering



(2) Faculty Potluck

Our annual potluck coincided with our monthly general body meeting right before holiday break. We invited Dr. Krishna Jayant to present his research, tell us his perspective on being a new faculty hire, and to give him a warm welcome into the department. We catered D&R BBQ and the attendees each brought a dish of their choosing to share.

Faculty Potluck

December 3rd, 2019

32 Attendees



(3) BME Bytes

The BME Bytes Seminar Series is a collaboration between the Purdue Biomedical Engineering Society and the Purdue Biomedical Engineering Graduate Student Association with the purpose of introducing undergraduate BME students to the breakthrough research occurring at the laboratories in the Weldon School of Biomedical Engineering while also developing the professional portfolios of graduate students.

BME Bytes Workshops

**February 24th, 2020
March 9th, 2020
March 23rd, 2020**

**10 Attendees
12 Attendees
Cancelled (COVID)**



(4) BME-PIIN Spring Interdisciplinary Research Symposium

The PIIN Research Symposium was jointly sponsored between the Weldon School of Biomedical Engineering and the Purdue Institute for Integrative Neuroscience and was meant to provide networking opportunities, catalyze collaboration, and present career development information for members of the Purdue community interested in areas intersecting biomedical engineering and neuroscience. Unfortunately, this event was due to occur in April and due to COVID-19, the event was canceled.

BME-PIIN Symposium

April 9th, 2020

Cancelled (COVID)

B. SOCIAL ACTIVITIES

The social committees for both Purdue BMES chapters are responsible for coordinating activities for our students to informally interact outside of their classes and research. We host a variety of events, on and off campus, to celebrate our diversity, to encourage school spirit, and generally facilitate department comradery. We advertise activities through word-of-mouth, posted flyers, e-mail, GroupMe, Instagram, and Twitter.

Undergraduate Purdue BMES Chapter

(1) Coffee and Convos

The Coffee and Convos was an event hosted by BMES, where coffee was provided for biomedical engineering students outside of their scheduled classes. This allowed students to take a breather before their midterms and relax while bonding with their peers. The Weldon School of Biomedical Engineering was able to provide the refreshments for this event.

Coffee Social

March 11th, 2020

50 Attendees



Graduate BMEGSA Chapter

(1) Sgt. Preston's wings and appetizers

The Biomedical Engineering Graduate Student Association hosted a night out at a local eatery, Sgt. Preston's. We provided appetizers and an environment for upper level graduate students to talk to and forge connections with the incoming first year graduate students in BME

Sgt. Preston's

August 13th, 2019

31 Attendees



(2) Trivia Night

As part of orientation week for the incoming first-year graduate students, the Purdue Biomedical Engineering Graduate Student Association hosted a trivia night at the Stacked Pickle. First year graduate students intermingled with older graduate students and worked together to try to win an assortment of prizes.

Stacked Pickle Trivia

August 14th, 2019

22 Attendees



(3) Bonfire

Again, as part of our department's orientation week for incoming first-year graduate students, the Purdue Biomedical Engineering Graduate Student Association held a bonfire at a graduate student's house to facilitate connections between the incoming class and older graduate students.

Graduate Bonfire

August 16th, 2019

35 Attendees



(4) Dunes

To continue fostering the connections between the incoming graduate students and upper-level graduate students formed during orientation week, the BMEGSA sponsored a trip for the department to the Indiana Dunes so that students could explore and enjoy Indiana's natural beauty.

Dunes Trip

August 24th, 2019

24 Attendees



(5) Halloween Bash and Pumpkin Carving Contest

Halloween is always a fan favorite so this year we decided to open our event to the faculty, staff, and the graduate students so that everyone could come together for the festivities. BMEGSA hosted a pumpkin carving contest where 10 teams competed for custom 3D printed pumpkin trophies. The event was a great success, faculty brought their family members and students brought their friends and everyone had a great time listening to spooky music and reliving their childhood!

Halloween Bash and Pumpkin Carving Contest

October 31st, 2019

46 Attendees



(6) Hot Chocolate Social

In order to relieve some of the stress our graduate students were facing due to finals week, the BMEGSA coordinated with the department to host a hot chocolate social so our students could take a quick break from all of the hectic activities of the end of semester.

Hot Chocolate Social

December 6th, 2019

35 Attendees



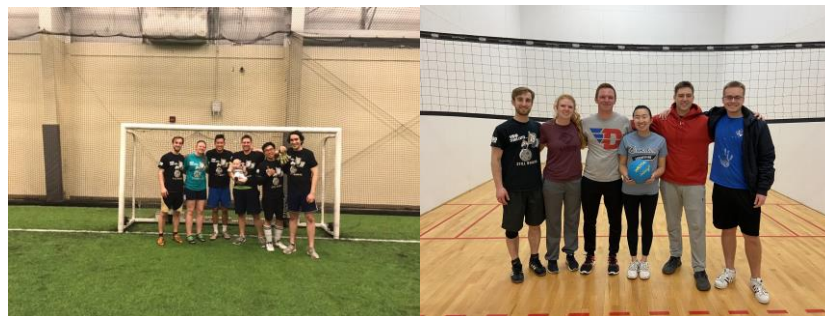
(7) Intramural Sports

To continue fostering a sense of community in our graduate student association, the BMEGSA sponsored many intramural sports teams this year including dodgeball, flag football, 3v3 basketball, wallyball, MAC soccer, and our intramural turf soccer team who won big in the championship!

Intramural Sports

Fall Semester

14 Attendees



(8) Merlin's Beard

During the recruitment period for the Weldon's graduate program, our BMEGSA hosted a game night so that the recruits for the department could mingle with current graduate students and get a good idea of the

Purdue University BMES Student Chapter, CDR 2019-2020

nature of our graduate program, the department's culture, and have any of their pressing questions about graduate life answered.

Merlin's Beard Game Night

February 20th, 2020

37 Attendees



(9) Night Out at the Vault

To continue showing the Weldon graduate program recruits what life is like in the Greater Lafayette area, the BMEGSA sponsored a get-together at the Vault, where current graduate students and potential new students mingled and played pool.

Pool at the Vault

February 21st, 2020

28 Attendees



(10) Global Get Down

This was a joint venture between the Biomedical Engineering Graduate Student Association and the Electrical and Computer Engineering Graduate Student Association to introduce students to multicultural cuisine and dance. This event hosted several different dance companies from Purdue including the salsa club, tango club, and swing dancing club.

World Dance Party

February 28th, 2020

43 Attendees



(11) Movie Nights (Spring)

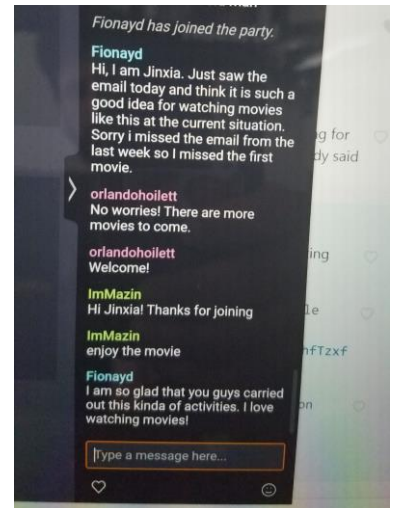
In the wake of COVID-19 event cancellations, BMEGSA organized movie nights two days per week so that friends and colleagues were able to stay connected during physical isolation. Titles included the Lord of the Rings trilogy, Detective Pikachu, Captain Marvel, Captain America, Casablanca, and City Lights.

Movie Nights

March 27th, 2020

43 Attendees Total

Date/Time	Movie Title	Access Method (Link below)
Friday Mar 27, 7pm	The Lord of the Rings: Fellowship of the Rings	Kast
Sunday April 5, 3pm	The Lord of the Rings: The Two Towers	Kast
Friday April 10, 7pm	The Lord of the Rings: Return of the King	Kast
Sunday April 12, 3pm	No Movie (Easter)	--
Friday April 17, 7pm	Detective Pikachu	Kast
Sunday April 19th, 3pm	Captain America: The First Avenger	Kast
Friday April 24, 7pm	Captain Marvel	Kast
Sunday April 26, 2pm	TBD	Kast
Friday May 1, 7pm	City Lights	Kast
Sunday May 3, 2 pm	Casablanca	Kast



(12) End of Semester Celebration (Spring, postponed)

Our department's GSA was originally planning to host a celebration for the end of the academic semester and for the turnover of the executive committees; however, the occurrence of COVID-19 has postponed this indefinitely due to the inability of our student groups to meet in person. If and when restrictions are removed, we will have a welcome back celebration

End of Semester Party

TBD

Cancelled

(13) Pizza making party (Spring, postponed)

Our social committee was planning a get-together where our graduate students would make homemade pizzas; however, the occurrence of COVID-19 has postponed this indefinitely for the time being.

Pizza party

TBD

Cancelled

(14) Faculty Mentor Award BBQ (Summer, postponed)

Each year, our department polls the graduate student community to then award the "best Faculty mentor" within Biomedical Engineering. Our voting process had already occurred, and the mentor had already been chosen; due to COVID-19, this event was also postponed indefinitely.

Faculty Mentor BBQ

TBD

Cancelled

C. INTER-CHAPTER ACTIVITIES

Graduate BMEGSA Chapter

(1) **Midwestern Speaker Exchange (Canceled due to COVID-19)**

The Midwestern Speaker Exchange was a planned seminar exchange between the BMEGSA at Purdue University and the BMEGSA at the University of Michigan. The selected speaker from University of Michigan was invited to Purdue to give a one-hour seminar to the department, meet with faculty and students, and experience the highlights of our campus and the Greater Lafayette area. Unfortunately, the stay at home order issued for the state of Indiana was issued the same week this event was due to occur and thus we were forced to cancel it.

Midwestern Speaker Exchange

March 13th, 2020

Cancelled

D. OUTREACH ACTIVITIES

The Purdue University BMES chapter aims to engage with the greater community of Lafayette, Indiana to inform them of our department's research and to encourage the next generation of scientists. Additionally, our chapter hopes to give a rewarding experience to BME students, by encouraging their development within the local community. We continue to interact with local schools to host outreach activities with kids and focused our efforts towards supporting other organizations as well.

Undergraduate Purdue BMES Chapter

(1) **Natalie's Second Chance Volunteering**

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.

Animal Shelter Volunteering

October 27th, 2019

8 Volunteers

Animal Shelter Volunteering

March 1st, 2019

12 Volunteers



(2) Coding for Kids

BMES collaborated with Purdue Engineering Outreach (PEO) to design a curriculum and train volunteers to teach coding to fourth graders. Specifically, four volunteers planned out the curriculum, five visited the students, and three board members oversaw the program. Meetings were held regularly to design a brainstorming/application-based curriculum, and the basics of algorithms were clearly defined within it. The volunteers visited the West Lafayette Intermediate School (WLIS), where both “offline” interactive activities as well as opportunities to explore code.org at personal challenge levels were established.

Coding for Kids

March 10th, 2020

12 Volunteers

Graduate BMEGSA Chapter

(1) Imagination Station Halloween Event

This was the first of several events that BMEGSA planned with a local children’s science museum, Imagination Station, to engage children and families from the greater Lafayette community.

Imagination Station Halloween Event

October 25th, 2019

4 Volunteers



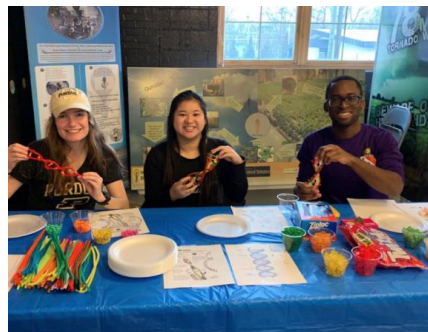
(2) Imagination Station Candy DNA

Our BMEGSA communicated with a local children’s science museum, Imagination Station, to host an interactive demonstration of how DNA is construed using candy to form the individual nucleotides; this was done with the purpose of explaining scientific concepts to children within our community in a way through which they would understand and interact productively with the concept.

Candy DNA at IS

February 3rd, 2020

3 Volunteers



(3) Imagination Station Magnetic Putty

Our BMEGSA again used our collaboration with Imagination Station, a local children's museum to host an interactive activity where children mixed silly putty with ferric oxide to make magnetic putty. They then used this magnetic putty in tandem with provided magnets to manipulate and explore different objects we provided. We then gave a simple explanation of magnetism and helped them color a worksheet illustrating these concepts.

Magnetic Silly Putty at IS

February 29th, 2020

2 Volunteers



(4) Imagination Station Conductive Paint

Our BMEGSA put on another event in collaboration with Imagination Station where our volunteers showed children how to construct simple circuits with a resistor and LED bulb using conductive paint to create a current path.

Conductive Paint Circuits at IS

March 7th, 2020

3 Volunteers



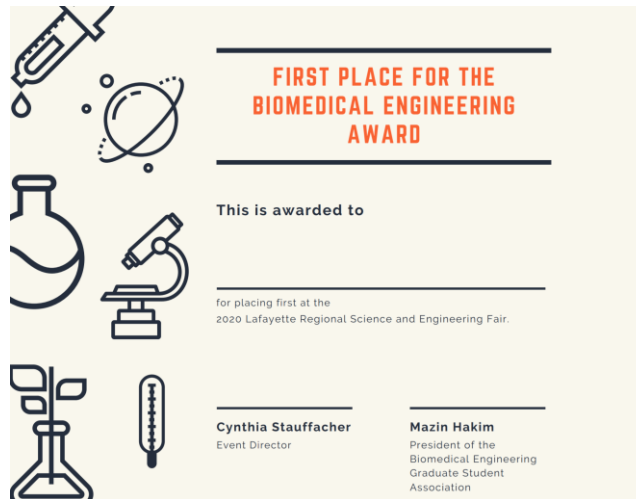
(5) Science Fair Prizes

Members of the Weldon Biomedical Engineering graduate program volunteered to judge science fair projects for the Lafayette Regional Science and Engineering Fair. Each year, the BMEGSA gives out awards to students in this fair who display creativity and ingenuity in their projects and scientific endeavors.

Science Fair Judging

March 29th, 2020

10 Volunteers



E. MENTORING ACTIVITIES

The Purdue BMES Mentorship Program aims to bring the Weldon School of Biomedical Engineering community together and to bridge the gaps between upperclassmen and underclassmen. This program was developed as a student-run organization to help upperclassmen build their leadership skills by guiding their peers through the challenges of biomedical engineering. The goal of the mentorship program for the underclassmen was for them to become familiar with the biomedical engineering program and feel like they were part of the larger Weldon School community. Overall, this program was created so that students in Purdue BME could build relationships with each other and grow the community within the school.

Undergraduate Purdue BMES Chapter

(1) Fall Mentorship Meetings

The first semester consisted of three meetings focused on establishing the program, bringing together sophomores, juniors, and seniors within our department to improve collaboration and teamwork between the lower and upperclassmen. The first meeting was an ice cream social. This meeting was conducted so mentors and mentees could be introduced to each other and feel a sense of community. They were also introduced to their houses, in which they would be working together to earn points to win the Best House Award at the end of the year. This would provide the students a platform to meet new people and make connections to ask for advice or help if needed. The second meeting was a Halloween-themed social event where each mentor-mentee pair attended in costumes to celebrate the holidays by playing games, eating candy, and having a fun time to build new social relationships among themselves. The final meeting for the semester was a Holiday-themed social event where they celebrated Thanksgiving, Christmas, and other holidays together as a group. The purpose of this meeting was to provide an atmosphere to the students to come and destress before finals as well as ask for help (if needed) from their seniors on how to get through the final stretch of the semester.

September Meeting

September 27th, 2019

33 Attendees

October Meeting

October 23rd, 2019

32 Attendees

November Meeting

November 20th, 2019

28 Attendees



(2) Spring Mentorship Meetings

During the spring semester there were three meetings scheduled for the mentorship program. The first meeting was a professional development meeting mainly focused on providing advice to the students on how to get internships/co-ops and/or research opportunities. The upperclassmen imparted their wisdom to the underclassmen based on their experience in industry/research labs, regarding best practices and so on. The next meeting scheduled was a graduate student panel, where graduate students were supposed to come and talk about graduate school/medical school/industry and other future career paths. They would provide advice on how to apply as well as other successful tips and advice they gathered through their experiences. The last meeting scheduled for the program was a social event with a game of Capture the Flag among the different houses. However, because of the COVID-19 pandemic and cancellation of all meetings and events, there was only one meeting in the spring semester, and the last two were unfortunately cancelled.

February Meeting
February Meeting
April Meeting

February 26th, 2020
March 31st, 2020
April 15th, 2020

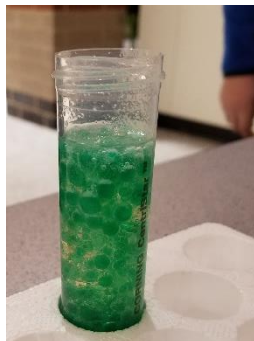
10 Attendees
Cancelled
Cancelled

Graduate BMEGSA Chapter

(1) Lava Lamps (Fall) West Lafayette Elementary School

As part of our Outreach programs, we sent volunteers to West Lafayette Elementary School to challenge students to use critical thinking to explain scientific phenomena, including the alka seltzer lava lamp. Our mentors helped students put the lava lamp together and guided them through postulations on how the experiment worked.

Lava Lamps



December 6th, 2019

4 Volunteers



F. OTHER INITIATIVES AND ACTIVITIES

Purdue BMES has hosted multiple events to help get inclusion in events as well as assist students during finals week. These initiatives serve to reach out to current BME students and provide information for ongoing initiatives of the club.

Undergraduate Purdue BMES Chapter

(1) Boiler Bash

The Purdue Engineering Student Council (PESC) organized a fair to promote engineering clubs. BMES was able to set up a booth and was given an \$100 budget. With this budget, we provided water bottles as well as “brain” erasers to students who were interested in the organization. Additionally, the board members were present to discuss the Purdue Biomedical Engineering Society and talk about the events and opportunities it offers. About 45 students were interested to learn more about the events and wrote down their contact information as a result.

BMES Callout

August 23rd, 2019

50 Participants



(2) Fuel for Finals

Fuel for Finals is an event that BMES hosts. Snacks are placed in the break room for students during the “dead week” of the semester (week before finals). It is a way to help students stay healthy and ready for finals.

Fall Fuel for Finals

December 2nd - 6th, 2019

50 Participants

Graduate BMEGSA Chapter

(1) IUPUI Connectivity:

(a) Coffee Break

In order to also forge connections with our graduate students at a distance on the IUPUI campus branch of the biomedical engineering graduate department, our BMEGSA hoped to host several “coffee breaks” so that these students could connect with each other and also partake in departmental events. These will be postponed or conducted remotely

Coffee Breaks in Indy

Spring Semester

Postponed

(b) Indy Symphony

The BMEGSA was in contact with the ticketing office at the Indianapolis Symphony to purchase 25 tickets such that a combination of our students from both the West Lafayette and Indianapolis campuses would attend the symphony and forge connections between the two campuses. However, COVID-19 unfortunately caused the postponement of this event to what we hope will be the fall semester.

Indianapolis Symphony

Spring Semester

Cancelled

(c) Newfields Museum

Our graduate student association was planning a trip towards the end of April to the Newfields Museum in Indianapolis in junction with our branch at IUPUI to continue to foster a sense of connection between the two campuses; unfortunately, while we had already sent out information regarding this event to our members, COVID-19 caused us to postpone the event indefinitely.

Newfields Museum

End of April

Cancelled

(2) Diversity and Inclusion

(a) Dia de la Independencia

We celebrated the history of the Mexican War of Independence and honored the culture with a presentation and traditional Mexican food (Conchas, churros) and games (Loteria)

Dia de la Independencia

September 18th, 2019

24 Attendees



(b) Tihar Celebration

We celebrated Tihar by learning about the holiday traditions, tasting cultural foods, and making rangolis which is a traditional decoration.

Tihar Celebration

October 28th, 2019

30 Attendees



(c) St. Patrick's Day Celebration

We learned about the traditional observance and the origin of St. Patrick's Day while catering food from Nine Irish Pub.

St. Patrick's Day Celebration

March 3rd, 2020

30 Attendees



(3) GSAC

(a) Beyond Coffee: Winter Warmup

Our BMEGSA teamed up with the Graduate Student Advisory Committee to put on an event with delicious pastries and coffee from a local bakery (Mama Ines) to bring together members from several different graduate student organizations within the College of Engineering. This event was meant not only to forge new connections but also to provide a much-needed break to our students. Representation from more than eight different departments attended.

Beyond Coffee: Winter Warmup February 2nd, 2020

80+ Attendees



(4) Special Programs:

(a) Step Contest

To promote physical and mental health in our students, the BMEGSA sponsored a step contest during the fall semester with several assorted prizes per week to encourage participation. Not only was this a way to foster healthy exercise breaks in our community, but it also was a way to promote taking a break for mental health.

Step Contest

September - October 2019

23 Attendees

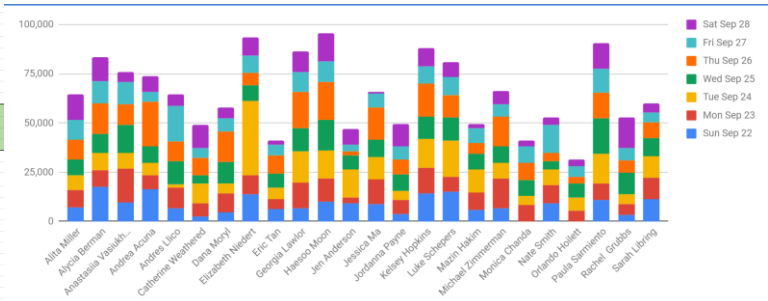
How to Participate:
 Every week has a tab to insert daily steps.
 Insert the number of steps taken in the appropriate boxes
 Insert your steps by TUES at 11:59pm of the following week for your steps to count in the challenge.

Benefits of STEPPING UP to the challenge:
 Walking can improve your mood
 Walking helps maintain a healthy weight
 Walking can strengthen your bones and muscles
 Walking can improve your balance and coordination
 Walking can prevent or manage various conditions, including heart disease, high blood pressure and type 2 diabetes

Physical Activity Guidelines:
 Daily Step Recommendation: ~10,000 steps (~5 miles)
 150 minutes moderate intensity activity/week or 75 vigorous intensity activity/week & 2 days/week strength and conditioning
 *That breaks down to about 30 minutes for 5 days/week!

Ideas for becoming more active:

Moderate Activity Ideas	Vigorous Activity Ideas
Walking two miles in 30 minutes	Race walking, jogging, or running
Biking five miles in 30 minutes	Swimming laps 30 minutes
Swimming laps for 20 minutes	Tennis (singles)
Running 1.5 miles in 15 min	Aerobic dancing
Water aerobics for 30 minutes	Bicycling 15 miles per hour or faster
Playing volleyball for 45 minutes	Jumping rope
Pick-up basketball for 20 minutes	Hiking uphill or with a heavy backpack
Jumping rope for 15 minutes	
Walking stairs for 15 minutes	



(b) Mental Health Yoga

The BMEGSA sponsored a yoga class for our students in collaboration with representatives from Purdue University's yoga club. Through this class, we encouraged and fostered an environment where graduate students could take some time to focus on their mental health through focused exercise.

Sahaja Yoga

November 13th, 2019

11 Attendees

IV. NATIONAL BMES MEETING

The BMES Conference is an event that provides an opportunity for the biomedical engineering community to showcase their research, network amongst other companies and schools, and be involved with various competitions/awards. The main highlight of the BMES conference for chapter organizations is the student chapter award, which is a series of awards ranging from best professional development award, to best mentorship program award. During this event, winning chapters for each award are recognized and given time to present on how they go about running their student chapter. After the presentation, other student chapters are given the opportunity to ask questions about the event and any other aspect about their chapter to learn and potentially improve their own chapter. During this event, members of the executive board who attended the meeting had the opportunity to talk with various chapters to improve the experience for Purdue biomedical engineering students.

A. ATTENDANCE

This year, a total of 21 BME students attended the National BMES Meeting, including 4 board members. Those with National BMES ID numbers are listed below.

Name	Email	Class	National BMES ID Number
Bethany Doehrman	bmdoehrm@purdue.edu	Undergraduate	4018566
Ben Walters	walte112@purdue.edu	Undergraduate	4018041
Jason Ummel	ummelj@purdue.edu	Undergraduate	4002596
Eva Yezerets	eyezeret@purdue.edu	Undergraduate	4020238
Lakmini Wilson	wilsonlj@purdue.edu	Undergraduate	4020278
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Tyler Diorio	tdiorio@purdue.edu	Graduate	4019380
Yue Leng	yueleng@purdue.edu	Graduate	4019879
Ho-Ching Yang	yang1399@purdue.edu	Graduate	4020649

B. PARTICIPATION

Out of the 21 students that attended, 12 had poster presentations and 8 had oral presentations. Specifications of the involvement of the students are listed in the table below.

Student Name	Class	Title	Type
Yue Leng	G	The Extracellular Matrix Directs Skeletal Muscle Organization in the Developing Mouse Forelimb	Poster
Ziqian Zeng	G	Impact of FITC Conjugation to Fibrinogen on Fibrin Clot Formation and Digestion	Poster
Bethany Doehrman	U	Aptamer-Functionalized Screen-Printed Electrode for Electrochemical Detection of Cocaine in Solution Towards a Wearable Biosensor for Detecting Cocaine in Sweat	Poster
Orlando Hoilett	G	Aptamer-Functionalized Screen-Printed Electrode for Electrochemical Detection of Cocaine in Solution Towards a Wearable Biosensor for Detecting Cocaine in Sweat Feasibility of a Ring-Based Photoplethysmogram to Measure Heart Rate, Respiration, and Blood Oxygen Design and Validation of an Optical Sensor System to Determine Metabolic Rate	Poster
		Roo LL: A Smart Device for Vital Sign Monitoring in Kangaroo Mother Care	Oral
Jason Ummel	G	Feasibility of a Ring-Based Photoplethysmogram to Measure Heart Rate, Respiration, and Blood Oxygen	Poster
Ben Walters	U	Roo LL: A Smart Device for Vital Sign Monitoring in Kangaroo Mother Care	Oral
Ho-Ching Yang	G	Assessing Accurate Cerebral Hemodynamic Responses to CO ₂ Challenge Using fMRI	Poster

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Nazanin Maani	G	Multiphysics Simulations of Drug Adsorption in the Chemofilter Device	Poster
Tyler Diorio	G	Multiphysics Simulations of Drug Adsorption in the Chemofilter Device	Poster
Kelsey Hopkins	G	Noninvasive Characterization of In Situ Forming Implant Diffusivity Using Diffusion-weighted MRI Comprehensive Computational Model of an Implantable, Bioresorbable Drug Delivery Device	Poster
Barrett Davis	G	Comprehensive Computational Model of an Implantable, Bioresorbable Drug Delivery Device Remodeling of PSD-95 through the Ca ²⁺ Dependent Activity of CaM/CaMKII in the Post-Synaptic Density	Poster
		Lateral Flow Assay for Early-Stage Cervical Cancer Detection	Oral
Emilie Newsham	G	Lateral Flow Assay for Early-Stage Cervical Cancer Detection	Oral
Kristin Byers	G	Versatile Printed Microheaters to Enable Low-Power Thermal Control in Paper Diagnostics	Oral
Jana Vincent	G	Characterizing Near-Infrared Spectroscopy Signal Under Hypercapnia	Oral
Alexander Ocken	G	Perlecan Knockdown Alters ECM Assembly and Structural Integrity during Cartilage Development	Oral
Eva Yezerets	U	The Role of Adenylyl Cyclase Termini in Synaptic Plasticity	Poster
Lakmini Wilson	U	The Role of Adenylyl Cyclase Termini in Synaptic Plasticity	Poster
Jonathan Cody	G	Driving Factors in Cytotoxic Cell Stimulation as Treatment for HIV: Insight from Mathematical Models	Oral

V. FUTURE DIRECTIONS

Undergraduate Purdue BMES Chapter

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. In terms of our Coding for Kids project, we hope to continue the partnership with Purdue Engineering Outreach (PEO) and West Lafayette Intermediate School (WLIS), even if this will have to be a distance learning-based initiative due to COVID-19. The next chapter may want to coordinate with teachers at WLIS to offer after-school activities/projects for students to work on to supplement the Code.org curriculum and record their progress. Additionally, 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 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. This has continually been the largest hurdle, as the closest BMES chapter is about 2 hours away. We have been able to observe other BMES chapters initiatives, through the National BMES Meeting, and will plan on reaching out upon implementation of our own ideas. Additionally, we plan to reach out to BMES chapters to collaborate on events/meetings in the future years to come.

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 and the utilization of engineering abilities through this program. Firstly, we would like to give the opportunity for Purdue freshmen to join the program, to learn more about the biomedical engineering program. With Boiler Bash, we learnt that many First Year Engineering (FYE) students are interested in biomedical engineering, and that including them will both increase attendance as well as give them information on the program.

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Additionally, possibly incorporating mini engineering programs that focus on teamwork will work towards improving the skill set of many of the future engineers at Purdue.

The most prominent goal for the Purdue Biomedical Engineering Society in the upcoming year is to draw in more involvement from students. Accomplishing this goal will require incentives that students have an interest in. Through light brainstorming, our executive board determined that possible options consist of more involvement with professors and grad students, offers of food or merchandise, hosting competitive game nights, inviting company representatives, holding company information sessions, and providing simple team-building engineering projects. Furthermore, due to COVID-19, we hope to develop more flexible programs and implement activities that may be able to be delivered online and can still pique the interest of students. Hopefully, we will be able to be more prepared for such an outbreak and have a plan for executing our events online for the upcoming year.

Graduate BMEGSA Chapter

Continuation of Present Initiatives

The BMEGSA has a long-standing tradition of successful initiatives and programs due to the efforts of our enthusiastic team. Many of the events from outreach, diversity, and social subcommittees recur each year and are improved upon as new leadership innovates on what has previously been done. Our outreach initiatives have expanded very well in recent years to include events at our local STEM education center, Imagination Station, as well as middle schools and the regional science fair. We will continue to offer these excellent programs with an emphasis on starting them earlier in the fall to offer a greater number of educational booths at Imagination Station. Additionally, due to COVID-19 restrictions we will continue to offer educational science kits for students to take home to limit exposure of our members and young children. Regarding our diversity events, we offer similar programs each year aimed to promote inclusion of and education about all cultural groups represented within our organization. Our focus lies in hosting cultural holiday themed events around the calendar year. These vary each year and as we continue this initiative, we plan to rotate the chosen holidays to include many different groups. Finally, our social event initiatives such as our welcome week, recruitment, and intramural sports events are successful programs as they promote the great community we have within our department and association outside of the office. It is important to note that these social events will need to be flexible moving forward due to COVID-19 restrictions on in person gatherings. A few programs such as streaming movie nights and social distance sports like frisbee have already been implemented to help students maintain connection in these times apart.

One important new program for the 2019-2020 academic year was our IUPUI Inclusion initiative. Since we have some Purdue students that conduct their research at the IUPUI campus in Indianapolis, we wanted to host events there to help them feel included with our student body, foster connections between students, and help extend the same resources offered to our main campus students. While this worked well on paper for us this year, we had limitations on funding and the onset of COVID-19 that limited our execution of our plans. In the following year, we hope to better enable this initiative by securing funding earlier in the fall rather than in the winter as well as have more active communications with the student representative from the IUPUI campus.

Implementation of New Initiatives

While we pride ourselves on excellent programming year to year, there is always room for improvement through the development of new initiatives. For the 2020-2021 academic year especially, there will need to be outstanding innovation to maintain, modify, and create programs amenable to the current pandemic situation. Three areas that we wish to implement new initiatives are peer mentoring, participation of non-engaged demographics, and remote events planning.

Peer mentoring is a valuable resource to both experienced and non-experienced students. We would like to initiate a new program aimed at mentoring first and second year graduate students as well as undergraduate students interested in pursuing graduate school. For our new graduate students, small mentoring groups will be established to pair one upper level student with 4-5 mentees. For the undergraduate students, we will partner

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with BMES in our department to host a graduate student panel in the fall to address research opportunities and a panel in the spring to address applying to graduate school.

Inclusion of students within the department is important to the BMEGSA, however it is noted that typically the same students come to all the events. While we recognize that every student has different level of time commitment allowed for non-research related events, we would like to focus efforts on ensuring the participation of students that do not actively attend events. This new initiative will involve more stringent advertisement for each event, increased incentives to attend, and a variety of interesting events. This initiative is subject to flexibility due to COVID-19, however it will be especially important to increase BMEGSA engagement during social isolation.

Finally, the BMEGSA is planning extensive innovation in our remote programming to continue to offer resources and support to our students during shutdowns and isolation. Our professional development team will be working on inviting speakers from across the world, setting up journal clubs, and BME Bytes will continue to offer graduate student presentations, all using video conferencing. Already, the BMEGSA has kickstarted an online group, the BMEGSA Coding Collab, aimed at remote tutoring for those seeking to begin coding projects. Our social committee will be focused this coming year on implementing virtual movie nights, happy hours, trivia, and board game nights. Finally, within our special programs committee, we will likely continue the mental health event initiative through virtual yoga, fitness events, book clubs, cooking tutorials, and our usual step contest.

We recognize that rebounding from this pandemic will be difficult as a student organization in that we will need to be flexible in the event of unforeseeable consequences, spikes in contagion, and University responses while also actively reaching out to our student community such that no member feels isolated due to the current circumstances. Most of our initiatives are to form connections between students, and we remain faithful that this goal will be accomplished due to the dedication of our executive board and our student body members regardless of the status of COVID-19.

OUTSTANDING MENTORING PROGRAM AWARD APPLICATION

BMES Student Award Committee, please consider our Chapter for the Mentorship Program Award.

Program Description

This year, the Purdue BMES Mentorship Program aimed to bring the Weldon School of Biomedical Engineering community together and to bridge the gaps between upperclassmen and underclassmen.

Goals

This program was developed as a student-run organization to help upperclassmen build their leadership skills by guiding their peers through the challenges of biomedical engineering, and familiarize underclassmen with the BME program, career paths available, and ultimately integrate them within the Weldon School community. Overall, this program was developed so that students in Purdue BME could build relationships with each other and grow the community within the school.

Target Audience

The target audience for the mentorship program included all students within the Weldon School of Biomedical Engineering program. The underclassmen (sophomores) were the mentees in the program and the upperclassmen (juniors and seniors) were the mentors.

Chapter Participation

In the first semester, 60 students total were involved in the program. This group was composed of 25 upperclassmen and 35 underclassmen. In the second semester, there were 30 students total in the program. This decline in participation was likely due to the fact that the sophomores enrolled in the program during the first semester felt comfortable enough with the Weldon School and were acclimated enough to BME that they did not feel the need to come back to the program.

Methods

Throughout the school year, there were intended to be six official meetings. There were supposed to be three meetings during the first semester and three during the second semester. However, due to COVID-19, there was only one during the second semester. Each meeting had a different theme so that all the students in the program would benefit from receiving a wide variety of information about Purdue's BME program and what it could offer them. These meetings were meant to be beneficial to both upperclassmen and underclassmen, but they were primarily geared towards underclassmen as these students were the ones who could most benefit from the information. Additionally, two new initiatives were brought about for development throughout the meetings:

Formation of Houses

For the mentorship program we divided the students into four different houses, based on a popular tv show: Game of Thrones. We had four different houses: House Stark, House Targaryen, House Lannister, and House Baratheon. The mentor-mentee pairs were sorted into different houses and they competed together with their peers to win points and eventually prizes. The students could win points by participating in other BMES events such as outreach, professional development, and social events. The purpose of this initiative was to improve collaboration among our members and to give them an incentive to attend other events as well.

Mentor Spotlight

During the spring semester we brought back the Mentor Spotlight, which was practiced a few years back by our organization. This method was put into place based on feedback from the Fall semester about wanting the program to incorporate more professional development information sessions. The mentorship spotlight is meant

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for mentors to come forward and give an informal talk about their life in biomedical engineering. This was a great opportunity for mentees to ask questions, get advice and be more familiar with all the possibilities and experiences of the program. Also, this was an important opportunity for mentors to showcase all the accomplishments and wisdom they had gained over the years.

As mentioned before, the first semester consisted of three meetings focused on establishing the program and bringing together sophomores, juniors, and seniors within the department. The first meeting was an ice cream social. This meeting was conducted so mentors and mentees could be introduced to each other and feel a sense of community. They were also introduced to their houses, in which they would be working together to earn points to win the Best House Award at the end of the year. This would provide the students a platform to meet new people and make connections to ask for advice or help if needed. The second meeting was a Halloween-themed social event where each mentor-mentee pair attended in costumes to celebrate the holidays by playing games, eating candy, and having a fun time to build new social relationships among themselves. The final meeting for the semester was a Holiday-themed social event where they celebrated Thanksgiving, Christmas, and other holidays together as a group. The purpose of this meeting was to provide an atmosphere to the students to come and destress before finals as well as ask for help (if needed) from their seniors on how to get through the final stretch of the semester.

During the spring semester there were three meetings scheduled for the mentorship program. The first meeting was a professional development meeting mainly focused on providing advice to the students on how to get internships/co-ops and/or research opportunities. The upperclassmen imparted their wisdom to the underclassmen based on their experience in industry/research labs, regarding best practices and so on. The next meeting scheduled was a graduate student panel, where graduate students were supposed to come and talk about graduate school/medical school/industry and other future career paths. They would provide advice on how to apply as well as other successful tips and advice they gathered through their experiences. The last meeting scheduled for the program was a social event with a game of Capture the Flag among the different houses. However, because of the COVID-19 pandemic and cancellation of all meetings and events, there was only one meeting in the spring semester, and the last two were unfortunately cancelled.

Time Commitment

Mentorship program members were only required to come to monthly meetings. However, attending socials and other Purdue BMES events outside of required meetings was recommended for the students in the program.

Budget

The main cost associated with the mentorship program was the cost of food and crafts. At each meeting, students were provided with light snacks and supplies for team-building activities. The costs for each meeting was about \$5-\$20. Throughout the semester, this cost totaled to about \$60. The costliest meeting was the first one, which was also an ice cream social. This meeting included purchasing several tubs of ice cream as well as toppings and syrup for these ice creams.

Assessment of Goal Achievement

We assessed our goals based on feedback from both mentees and mentors. Feedback is given both after the first and second semester. After the first semester, changes are implemented based on the feedback provided. After the fall semester, most comments were to include more professional development experiences. Thus, collaborating with our professional development sector many events were initiated (including the graduate student panel). However, as this event was cancelled due to COVID-19, we hope that feedback can be carried over into next year's mentor program.

Future of Program

The program will continue in the upcoming year as our mentorship program has grown tremendously 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 of COVID-19. Additionally, our society hopes to implement more interactive events that target teamwork and the utilization of engineering abilities through this program. Firstly, we would like to give the opportunity for Purdue freshmen to join the program, to learn more about the biomedical engineering program. With Boiler Bash, we learnt that many First Year Engineering (FYE) students are interested in biomedical engineering, and that including them will both increase attendance as well as give them information on the program. Additionally, possibly incorporating mini engineering programs that focus on teamwork will work towards improving the skill set of many of the future engineers at Purdue. Finally, we would like to make the meetings both fun and informative so that all students in the program benefit from the experience of being a mentor or a mentee. Lastly, we hope to have some of the current mentors and mentees return next year as mentors for the incoming sophomore class of biomedical engineering students.

Thank you for your consideration.

Sincerely,

The Purdue BMES Mentorship Committee

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