

Binghamton University Biomedical Engineering Society Chapter Development Report 2014-2015

Contributors:

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Executive Summary:

Binghamton BMES hosted many events and activities throughout the 2014-2015 academic year. Our chapter aimed to increase our presence on campus through greater advertisement in order to garner a larger following while also providing members a positive experience through professional, social, and volunteer events. Our chapter hosted more social events in autumn with a greater focus on professional events during the spring and community outreach activities routinely offered throughout the year. Binghamton BMES witnessed tremendous gains this year with an increase in student membership and greater student involvement in our general body meetings and events. An increase in advertisement through our social media campaign and consistent work on our weekly newsletter helped us reach our goals. We would like to acknowledge and thank the faculty and staff of the Watson School of Engineering and the Department of Biomedical Engineering, for all of their support for our chapter's endeavors. This year our chapter sent a representative to an inter-chapter meetup in New York City, and we are excited to further involve ourselves with other student chapters in the future. We would also like to focus on improving and fortifying our current efforts in addition to fostering growth in or organization during the 2015-2016 academic year.



May 25, 2015

To the Biomedical Engineering Society Administration,

As the 2014-2015 academic year draws to a close, I take great pleasure in describing the successes and achievements that the Binghamton BMES student chapter has made in its second year of operation since the Binghamton Bioengineering Association received a student charter under the national Biomedical Engineering Society in 2011. The Binghamton student chapter of BMES has served both the campus and local community in a plethora of ways as outlined in the proceeding report.

The journey began with the recruitment of a larger executive board during the previous summer and into the academic year. This expansion allowed for the greater flow of ideas and division of labor throughout the year while also providing greater opportunities for students with an increase in events. Collectively, we sought to develop the society through an increase in membership and involvement, a greater exposure of biomedical engineering applications and careers toward the student body, and a greater sense of unity amongst the biomedical engineering community. A key component in our operations that led to success in reaching our objectives can be attributed to consistent communication through various media including weekly e-board meetings, Groupme, and e-mail. Updating one another helped facilitate the implementation of events in addition to holding accountability of each person involved. Another factor that assisted in our mission lies in the use of our weekly newsletter and forms of social media to advertise our efforts. We would also like to thank the Biomedical Engineering Department and the Watson School of Engineering for allowing us to advertise our events to the student body through classroom announcements and e-mail listservs.

Binghamton BMES has attempted to cater to the student body in numerous ways as detailed in the following report. One noteworthy example includes our "What to Do with a BME Degree" Event, which showcased a panel of professors and an industry representative who all described their professional life path to a room packed with students. Another instance includes out ICK! (I'm a Complex Kid!) science fair for students in grades K-6 which we hosted annually for nine straight years. This event allowed young children to explore science and engineering through hands on activities while also allowing the student body to volunteer and involve themselves.

Our organization hopes you take as much pride as we do in reading our accomplishments this past year. While we do aim to uphold our current goals of this year, we also plan to embrace our subsequent goals for the following year which include stronger engagement in inter-chapter activities, creation of a stronger mentoring program, and further establishment of national society benefits to the student body.

Sincerely,

Stephen Fischer

Stephen Fischer

President, Binghamton BMES

Gretchen Mahler Faculty Advisor, Binghamton BMES Assistant Professor Department of Biomedical Engineering



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I. Administrative Report

Abstract

Management and direction of Binghamton BMES is organized in a clean format as demonstrated in the officer tree shown below. The President and Vice President work closely together on a variety of tasks with the other officers placed below them on the hierarchy with regards to officer responsibilities. Each officer is assigned roles tailored to his/her particular position, but the small tree encourages consistent communication for successful implementation of responsibilities. Currently, no subsections or committees exist underneath any of the e-board positions; however, we hope to incorporate these in the future.

Executive Board/Officers Information

President Vice President

Treasurer

External Affairs Internal Affairs

Fundraiser

Marketing

Community Outreach



Name: Stephen Fischer Position: President

Email: sfische5@binghamton.edu
Duties: Organize and host meetings;
create agendas for e-board; serve as
main club correspondent; uphold the

mission statement of BMES

Name: C Position: Email: c Duties: I

Name: Cara Jozefowski Position: Treasurer

Email: cjozefo1@binghamton.edu
Duties: Keep accurate financial
records; balance budget accordingly;
update the treasurer's log consistently

Name: David Feigenbaum

Position: External Affairs Coordinator Email: dfeigen1@binghamton.edu
Duties: Organize graduate school visits, industry tours, and social activities off-campus; coordinate tasks

such as carpooling

Name: Mitchell Erbe Position: Internal Affairs

Coordinator

Email: merbe2@binghamton.edu
Duties: Organize on-campus events;
ascertain projected attendance;
contact individuals and assign tasks



Name: Gabriella Shull Position: Vice President

Email: gshull1@binghamton.edu Duties: Draft weekly newsletters; keep minutes of weekly meetings; assist eboard members to ensure events are carried out as planned.

Name: Anthony Pereira

Position: Director of Fundraising Email: apereir2@binghamton.edu
Duties: Brainstorm fundraising platforms; stage events to raise capital for club endeavors; collaborate with other groups



Name: Kerry Donnelly

Position: Director of Social Media &

Marketing

Email: <u>kdonnel2@binghamton.edu</u> Duties: Administer social media accounts; promote and advertise events through these platforms.



Name: Hannah Mitchell Position: Community Outreach

Coordinator

Email: hmitche2@binghamton.edu
Duties: Plan and coordinate volunteer efforts; correspond with members and organizations of the community



Membership & Attendance

Binghamton BMES regularly held general body meetings biweekly and events every other week. The following includes a layout of our events with attendance.

Event	Date	# Member Attendees
General Interest Meeting 1	9/15/2014	12
General Interest Meeting 2	9/18/2014	9
Alzheimer's Walk	9/21/2014	11
General Body Meeting 1	10/16/2014	20
U. of Rochester Info Session	10/17/2014	19
Ice Cream Social	10/20/2014	22
General Body Meeting 2	11/6/2014	11
Student-Faculty Dinner	11/10/2014	10
Hosted Late Nite	11/14/2014	19
Kopernik Observatory Visit	11/14/2014	9
General Body Meeting 3	11/20/2014	27
General Body Meeting 4	12/4/2014	11
Study Room	12/14/2014	2
General Interest Meeting 3	2/5/2015	27
REU Workshop	2/12/2015	10
General Body Meeting 5	2/19/2015	26
Engineers Week	2/28/2015	16
General Body Meeting 6	3/5/2015	23
Lucy Volland Talk	3/11/2015	9
What to do with BME Degree	3/12/2015	33
CPSI Biotech Visit	3/19/2015	16
Vestal Math and Science Fair	3/20/2015	5
I'm a Complex Kid!	4/19/2015	39
General Body Meeting 7	4/30/2015	23

Executive Meetings

Weekly meetings were held with the executive board in order to coordinate activities. The image to the right is a sample of a weekly agenda which was utilized to optimally guide e-board meetings.

BMES Eboard Agenda Week of Mar. 29th – Apr. 4th 1) Internal Affairs a) Junior/Senior Showcase i) Any word from Kaiming? b) Meet the Professor, staring Dr. German 2) Treasurer a) 1Th Number b) Treasurer Stuff – making spreadsheet 3) External Affairs a) Grad School Visit Cornell i) Check signups ii) Any details we should know so far b) Other potential project: i) Shadow a BMETHOspital Tour → Any research update? 4) Community Outreach a) Relay for Life team is now online! i) Sign up and encourage your friends to do so iii) Facebook Event for promotional purposes? b) LiOkt ii) Physical Facilities Form ii) School Update (1) Which is chools do we need to give flyers to? (2) Need to deliver this week → Estimate of when to make these trips with whom? iii) Inventory finalized iii) Finalized Activities v) Volunteer sheet sent out through newsletter vi) We will get emails about this event 5) Marketing a) Relay Marketing i) Relay probably has flyers we can use iii) Binghamton might have resources or flyers b) Instagram & Facebook



II. Treasury Report

Financial Summary

Binghamton BMES hosted a variety of professional, social, and community events that resulted in some financial expenditures for food, supplies, labor, etc. Our organization is tied to the Thomas J. Watson School of Engineering, and the Staff Assistant to the Dean's Office, Mary Jo Kopyar, helps handle our finances and processes the paperwork for reimbursement purposes. Our organization does not receive any money from the Student Association nor the Watson School. Much of the funds in our account have come through past fundraising when the organization began as "The Binghamton Bioengineering Association."

Balance Sheet

TOTAL EXPENSES SHEET			
Activity	Date	Spent	Remaining
setup/cleanup - ICK Event	7/31/2014	\$186.53	\$4,080.93
reimburse pizza for BMES meeting 9/15/14	12/9/2014	\$35.50	\$4,045.43
Reimburse food for 10/20/14 & 11/10/14	12/9/2014	\$138.71	\$3,906.72
Reimburse BMES membership registrations	12/9/2014	\$30.00	\$3,876.72
Reimburse BMES membership registrations	12/9/2014	\$53.39	\$3,823.33
Reimburse pizza for BMES meeting 11/10/14	12/9/2014	\$19.99	\$3,803.34
GIM Pizza	1/10/2015	\$40	\$3,763.34
Reimburse pizza for BMES meeting 2/2/15	2/17/2015	\$35.50	\$3,727.84
Wind Powered Vehicles	3/19/2015	\$15	\$3,712.84
BMES membership fees	3/23/2015	\$30.00	\$3,682.84
"What to do with a BME degree" Food	3/30/2015	\$51.45	\$3,631.39
ICK! printing fliers	4/2/2015	\$220	\$3,411.39
ICK! Shirts	4/13/0205	\$654	\$2,757.16
BMES 2015 shirts	4/14/2015	\$527	\$2,230.66
ICK! supplies	4/15/2015	\$501	\$1,729.66
ICK FUNDRAISER (cash only)	4/19/2015	-\$874	\$2,603.66
ICK FUNDRAISER (checks only)	4/19/2015	-\$625	\$3,228.66
TSHIRT SALES	4/30/2015	-\$86	\$3,314.66

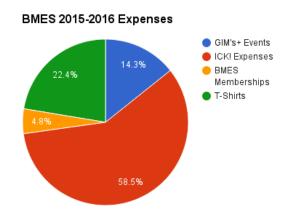


Figure 1 Visual Representation of Binghamton BMES 2014-15 Expenses



III. Chapter Activities

IIIA) Industry and Professional Development Activities

Abstract

As a student chapter of a professional engineering society, Binghamton BMES strives to provide excellent events that expose students to various opportunities available for their future careers in both research and industry. Our Internal and External Affairs Coordinators typically correspond with professors, companies, and other colleges in an effort to have individuals with first-hand experience share their knowledge. On-campus events from experienced professionals came from a panel of BME professors, a visit from alumna Lucy Volland, and an information session from the University of Rochester. Members also toured CPSI Biotech industries to gain a glimpse of what working at a biomedical-based company can feel like.

University of Rochester Info Session

Date: 10/27/2014

Location: Watson Commons

Description: The Binghamton Biomedical Engineering Society invited Dr. Greg T. Rdowski from the Center for Medical Technology and Innovation at the University of Rochester to discuss the variety of offerings the University of Rochester has for a biomedical engineering graduate education on both the Masters' and PhD level. Dr. Rdowski provided brochures, presentations, free pens, and best of all free pizza! Students had the opportunity to ask a variety of questions while learning about the benefits of attending Rochester for further education.

REU Workshop

Date: 02/12/2015

Location: University Union

Description: Binghamton BMES invited Dr. Gretchen Mahler from the Biomedical Engineering Department to help discuss the process of applying to REU, Research for Undergraduates, programs. President Stephen Fischer began by presenting a couple of articles and guidelines found on the internet written from participants of past REU's at different schools. Dr. Mahler further walked the student through the process by sharing insight on her experience with applications, how students should go about asking for letters of recommendation and choosing which programs to apply to.

Alumna Lucy Volland Visit

Date: 03/11/2015

Location: University Union

Description: Lucy Volland graduated from Binghamton University in 2011 with a BS in Bioengineering. Since then she has taken on a role in adMarketplace, an organization that helps match internet search queries to advertisements from a variety of companies. Lucy shared her experiences regarding her life at Binghamton and her post-graduate life, and she discussed the plethora of options available for young graduates.



Alumna Lucy Volland from the Class of 2013



CPSI Biotech Tour

Date: 03/19/2015 **Location**: Owego, NY

Description: CPSI Biotech is a biomedical company dedicated to developing and researching cryoablation technologies to fight cardiovascular conditions and cancers. Binghamton BMES had the privilege of touring their facilities, interacting with their managers, and witnessing the usage of their SCN-LEM (Super Critical Nitrogen-Liquid Ejection Module) in a tank of water as a demonstration. Dr. John M. Baust gave a very interesting talk about the history of the company, the numerous technologies it has produced, and its current plans for the future.



Attendees of the Binghamton BMES at CPSI Biotech.



IIIB) Social Activities

Abstract:

All work and no play makes engineers dull people. Our chapter aims to foster and build a community that encourages students to interact and network with one another in a friendly atmosphere. Much of our social activities took place during the fall 2014 semester, in which we held three separate events that provided an outlet for fun and some learning outside the typical professional and academic environments. Our ice cream social and student-faculty dinner brought numerous people together over food and conversation while the trip to the Kopernik Observatory offered students a chance explore a fun scientific topic in a unique setting.



Bing BMES members enjoying icecream at the social.

Ice-Cream Social

Date: 10/20/2014

Location: Watson Commons

Description: There's no better way to break the ice with fellow students than with ice cream! Binghamton BMES hosted an ice cream social on a Monday evening in the Watson Commons located in the Engineering building for all members to enjoy. This activity helped some members relax right before midterm exams and bond with some of their fellow friends and students over a delicious treat.

Kopernik Observatory Visit

Date: 11/14/2014

Location: Kopernik Observatory in Vestal, NY

Description: Our field of study, Biomedical Engineering, is innately interdisciplinary so we jumped on the opportunity to host a visit the Kopernik Observatory to learn about astronomy in the neighboring town of Vestal, NY. In addition to being exposed to amazing telescopes, we attended a talk hosted by the observatory on how paleontologists' views of dinosaurs have dramatically changed in the past decade due to advances in technology. Members had a fantastic experience learning about fields of study we may not have been exposed to in our regular curriculum.



A volunteer showing our group one of the largest telescopes of the facility at Kopernik Observatory.

Student-Faculty Dinner



A selfie of student attendees having dinner.

Date: 11/10/2014

Location: University Union

Description: Between all the classes, homework, and other assignments it can be difficult to interact with your favorite professors personally. Binghamton BMES aimed to address this problem with the best remedy out there: free food! Numerous faculty and students gathered in the Union on a November evening to enjoy submarine sandwiches, snacks, refreshments, and ice cream while engaging in more personal conversations. The evening began by allowing everyone to grab some food and socialize for a while. Once BMES



Ben Ho, left, talking with Dr. Plavac, right.



thanked everyone for coming, each faculty member was given a chance to introduce his/herself, their role in the department, and an overview of their current research efforts. Students and faculty alike found this to be a wonderful opportunity to interact more personally with one another outside of the traditional academic setting.



IIIC) Inter-Chapter Activities

The Stony Brook University BMES student chapter invited us to attend the first annual BMES student chapter meetup in New York City. The first of its kind, this event united 10 BMES student chapter representative groups and allowed each to present a best practices discussion. Gabriella Shull, Vice President, was the only Binghamton University BMES member available to participate and discussed our cornerstone fundraising/community outreach event titled "I'm a Complex Kid!" Each student chapter was able to learn the exciting practices occurring across the Northeastern student chapters. Former Vice President of the Biomedical Engineering Society, Dr. Gilda A. Barabino, concluded the meeting with an empowering speech encouraging events like this meetup to be viewed as precedent for future BMES student chapter collaboration. After the formal meeting, contacts were formed with many participating universities, Cornell University in particular due to the close proximity of our universities. Although a planned visit to the graduate BME program at Cornell University did not occur due to lack of general interest, our chapters have discussed future collaborations especially in community outreach driven activities.



Vice president, Gabriella Shull, discusses ICK! at the first annual BMES student chapter meetup in



IIID) Outreach Activities

Abstract

When Binghamton BMES is not working on developing the social and professional aspects of Binghamton, it is devoted to serving the on-campus and off-campus community with a sense of pride whether it be working with children or performing hands-on labor at charitable events. Our first outreach endeavor consisted of setting up at a Walk to End Alzheimer's in which helped with physical setup of the event for a couple hours. We concluded the fall semester by providing members a chance to volunteer at our make-your-own-ice-cream activity held for students on a Friday night at the University Union. Our work with children occurred through our members' involvement during Engineers' Week through our wind powered vehicles activity and at our annual science fair ICK! (I'm a Complex Kid!) We also connected with local adolescent students during our visit to Vestal High School with the American Society of Mechanical Engineers (ASME) to showcase the possibilities of engineering and science.

Walk to End Alzheimer's

Date: 09/21/2014

Location: Otsiningo Park in Binghamton, NY

Description: Binghamton BMES took 7 members to help volunteer with setup on a bright Sunday morning in September at Otsiningo Park in Binghamton, NY for a Walk to End Alzheimer's, a fundraising and awareness walk sponsored by the Alzheimer's Association. Members performed a variety of tasks including posting up sponsor signs along the course, spreading out snacks on tables, and moving boxes with various materials needed for the day. The walk itself had a tremendous 673 walkers and raised a total of \$49,195.84 toward the cause.



Left: BMES members pose in front of the Walk for Alzheimer's sign for a picture after a morning of beneficial work

Right: BMES members Mitchell Erbe and Cara Jozefowski help put together some stands for the event.



Late Night Binghamton

Date & Time: 11/14/2014 8pm-11pm **Location**: University Union Lobby

Description: Going along with our usual tradition of having ice cream at events, Binghamton BMES decided to do a "Make Your Own Ice Cream Event" at Late Night Binghamton, an organization that provides entertainment and activities for students during Friday and Saturday nights. BMES recruited 8 volunteers in addition to a few e-board members to guide students through the process of making their own ice cream. The event was so successful that we ran out of supplies an hour before we intended to conclude!



Students making ice cream at our Late Night Event.



Engineers Week

Date: 02/28/2015

Location: Innovative Technologies Center (ITC)

old-time **Description**: **Taking** an favorite activity **BMES** volunteered help children members build wind-powered vehicles to out of construction paper, tape, straws, and lifesavers as part of our activity at the Watson School's annual E-Week. The week is devoted to providing children a glimpse into the fun behind engineering and science through hands-on activities.



Volunteers assisting children making wind powered vehicles.

Vestal High School Math and Science Fair

Date: 03/20/2015

Location: Vestal High School

Description: High School students had the opportunity to interact personally with the American Society of Mechanical Engineers (ASME) and Binghamton BMES to learn about possibly careers and applications of engineering. BMES showcased morse code through an Arduino unit while ASME demonstrated a simple 3D printer that created figurines of Pokémon. Although most other invited groups could not make an appearance, the event was successful for those students who stopped by.

ICK!

Date: 04/19/2015

Location: Center of Excellence (COE)

Description: Each year, Binghamton BMES invites children from around the local area to engage in fun science activities at our annual ICK! (I'm a Complex Kid!) science fair! BMES members volunteered for the morning and afternoon sessions to help instruct kids on how to perform the experiments and their scientific outcomes. Some children love it so much come back each year to participate! The event was a fantastic and enjoyable fundraiser for the society.



Above: Volunteers helping children build vehicles.



Left: BMES members Peter Ta and Kerry Donnelly instruct children how to make ice creamin a baggie from simple ingredients.

Right: BMES members Christopher Coogan and Cara Jozefowski explain to kids the science behind making a Biome in a Baggie.





IIIE) Mentoring Activities

What to Do with a BME Degree Panel

Date: 03/12/2014

Location: University Union 103

Description: Binghamton BMES invited a variety of professors with both industry and research experience to share their thoughts and experiences. Dr. Amber Doiron, Dr. Kaiming Ye, and guest industry representative, Dr. SuPing Lyu, from MedTronic were in attendance with an audience of over 30 undergraduate biomedical and bioengineering students. Students had the opportunity to ask questions pertaining to different aspects of pursuing an engineering career while also garnering knowledge and wisdom from these professionals. The event concluded with a reception consisting of food and refreshments and personal time to talk with the panelists.



Dr. Kaiming Ye, guest representative from medtronic, and Dr. Dorian on pannel.



Panarama view of students carefully listening to the wise words of Dr. Kaiming Ye, Dr. Amber Dorion, and Dr. SuPing Lyu.



IIIF) Other Initiatives and Activities

Abstract

Binghamton BMES also engages in numerous other activities and initiatives that fall outside the spectrum of the traditional professional, social, and outreach endeavors to which the organization is accustomed. This year BMES performed unique projects on a variety of levels in the organization that helped promote our brand, provide members a chance to participate, and assist the community locally and at large. We expanded our social media platform through the utilization of Facebook, Instagram, and LinkedIn to further advertise our events while also crafting a professional network for students and alumni. Our custom t-shirts give members a sense of identity while also allowing them to support us financially and commercially by wearing our name. BMES helped the community by catering the senior design presentation and co-hosting a blood drive with Red Cross and Tau Beta Pi. Finally, we encouraged participation through activities at general body meetings.

Senior Design Catering

Date: 05/09/2015

Location: Old Union Hall

Description: Each year, the senior bioengineering students showcase their capstone projects in front of numerous professors, students, and professionals. The Biomedical Engineering Department reached out to Binghamton BMES and asked to cater the event with a given budget of \$500. Binghamton BMES purchased sandwiches, sides, refreshments, and desserts for an audience of over 70 individuals present.



Left: Senior BE students showcase their finished product for their senior capstone design class.

Right: Students, faculty members, and other engineering professionals in attendance look on in interest at the 2015 Senior Capstone Design Presentations.



BMES Apparel



A t-shirt created by and for the Binghamton BMES.

Description: This year Binghamton BMES decided to order custom design t-shirts for club members to purchase. The e-board put out a notice for any members who wished to design the shirt with the promise of a free t-shirt to any person whose design was accepted. Due to a low response, however, the BMES e-board crafted and submitted a design to customink.com for printing and delivery. The t-shirts came in near the end of April 2015, and we plan to sell these throughout the 2015-2016 academic year.



Social Media & LinkedIn Initiatives

Description: This year in an effort to create a branded name for itself Binghamton BMES designed its own logo, started a Facebook account, and created its own LinkedIn profile to help promote the organization through status updates and photo uploads. In addition, BMES also opened up an Instagram account to further push its aesthetic campaign via photo sharing initiatives with the application. BMES continued to use its website and twitter account as well, although to a lesser extent this year.

Red Cross Blood Drive

Date: 03/03/2015

Location: Old Union Hall

Description: Binghamton BMES co-hosted a blood drive with the Red Cross Club and Tau Beta Pi from 12pm-6pm on a Tuesday. Advertisements were made through email, classes, and social media. The drive collected 27 units of blood on a goal of attaining 36 units and helped save lives in the process thanks to all that donated.



general body meeting.

General Body Meeting Activities

Description: Throughout the year, various activities were performed at general body meetings in order to encourage participation and provide general entertainment for the members present as opposed to a traditional general body meeting. One prime example includes the first general body meeting of the year in which attendees were divided up into groups and

Marshmallow towers created at instructed to build a marshmallow tower with 3 minutes. The team with the highest standing



Winners of marshmallow tower

tower won four \$5 gift cards to the school bookstore. Another example included the general body meeting that took place right before Engineers Week in which members had 5 minutes to construct a wind-powered vehicle as teams. These vehicles were then raced and the winner was allowed to keep an entire bag of lifesavers.



IV. National BMES Meeting

Abstract

The 2014 annual BMES meeting exposed students to the latest developments in the field of Biomedical Engineering through plenary and intimate presentations, as well as provided members with opportunities to form connections with fellow peers and professionals from across the nation. Vice president of the Binghamton BMES, Gabriella Shull, met with representatives of fellow student chapter of the University of Southern California at their informational booth. This encounter nurtured the growth and development of our nascent programs due to the advice and information provided to us by the older chapter. Overall, the meeting enlightened us to the opportunities available to us as a chapter and to the power we have as professionals of a larger society.

Member Attendance Information

The following members from Binghamton University attended the 2014 National BMES meeting in San Antonio, Texas. All attendees presented research posters.

Graduate/PhD. Student Attendees – Sudip Dahl, Lucia Liu, Sara Mina, Courtney Sakolish Undergraduate Attendees - Gabriella Shull

Sample Research Presentations

- 1. S. Mina, W. Wang, Q. Cao, B. Murray, P. Huang, and G. Mahler Development of a Microfluidic Device to Study the Role of Mechanobiology on Endothelial to Mesenchymal Transformation.
- 2. L. Liu and G. German. Dynamic Drying Mechanics of Human Stratum Corneum and the Effects of Moisturization.
- 3. C. Sakolish, J. Cohen, M. Reiss, and G. Mahler. A Microfluidic Device to Model Active and Passive Transport Functions of the Human Kidney
- 4. G. Shull, J. Richter, J. Fountain, G. Mahler, and A. Fiumera. The Effects of Nanoparticle Ingestion on Glucose Transport and Uptake in the Gut Microbiome.



Faculty and students at the Binghamton University information booth at the 2014 BMES annual meeting.



V. Future Directions

Abstract

Given our overall success this year, Binghamton BMES would like to improve upon some of its current events as well as some of its activities that did not come to fruition, such as Relay for Life and a graduate school visit. Our chapter also has plans to design a new website to increase our presence and develop committees to encourage participation amongst general members. Additionally, we aim to continually solidify our reputation within the engineering community through our involvement in events hosted by the Watson School of engineering and through collaboration with two newly formed engineering groups, Engineering World Health (EWH) and Alpha Eta Mu Beta (AEMB), devoted to biomedical engineering. Through these initiatives Binghamton BMES will flourish in its efforts to uphold the vision and mission statement of the national Biomedical Engineering Society.

E-board for 2015-2016 Academic Year

Name	Year	Officer Position	Contact Email
Stephen Fischer	Senior	President	sfische5@binghamton.edu
Gabriella Shull	Senior	Vice President	gshull1@binghamton.edu
Cara Jozefowski	Sophomore	Treasurer	cjozefo1@binghamton.edu
David Feigenbaum	Senior	External Affairs Coordinator	dfeigen1@binghamton.edu
Christopher Coogan	Senior	Director of Marketing & Social Media	ccoogan1@binghamton.edu
Adam Adler	Junior	Director of Fundraising	aadler6@binghamton.edu
Kei Harada	Senior	Internal Affairs Coordinator	kharada2@binghamton.edu
Nicole Martucci	Senior	Community Outreach Coordinator	nmartuc2@binghamton.edu

Creation of Committees

This past academic year BMES hosted a wide variety of events and activities on both a small and large scale level in which the organization takes great pride. However, the only way to improve and expand upon our current repertoire of ideas while also giving members a chance to participate will come in the form of committees. Currently, we hope to implement committees for our large-scale events, such as ICK, and plan to have e-board members oversee these committees. The primary purpose of these groups is to give members an opportunity to engage themselves with the organization on a deeper level through event planning. This also allows the officers to see who has capability of potentially serving on a future executive board.



New Website Design

When Binghamton BMES first started as the bioengineering association, the management created a website with the address www.bingbe.blogspot.com. Although this website has been used in the past to provide updates for the general membership, the current management would like to create a new website that more accurately represents the organization under the national Biomedical Engineering Society. Our new Director of Social Media and Marketing for the 2015-2016 year is currently investigating the possibilities of hosting a website on a Binghamton University domain as well as other website platforms.

Expansion of Fundraising Efforts

Much of our organization's funds have been garnered overtime through our annual ICK! fundraiser. However, we would like to increase our activity in this sector to raise funds for not only our organization as a whole, but for charitable institutions as well. An example would include our attempt to raise funds for Relay for Life this past year through a chess for cancer tournament. While this did not pan out successfully, we would like to reboot that concept in addition to other fundraising campaigns, such as a hackathon in conjunction with the on-campus group Hack BU. Hosting these types of events also serves as an outlet for increased membership participation and expansion of our name throughout the campus and local community. As a method of ensuring the success of these efforts, we plan to establish certain goals and utilize our committees to further assist in the organization of these events.

Collaborations with New Engineering Groups

This past year the Engineering World Health (EWH) organization started up on campus, and BMES even co-hosted a general body/interest meeting with its e-board. The organization aims to provide biomedical technologies to developing world countries through fundraising campaigns and opportunities to travel to these countries for either spring or summer breaks. Incidentally, two biomedical engineering students this past semester also submitted an intent to charter packet to Alpha Eta Mu Beta (AEMB), the honor society for biomedical engineering. Binghamton BMES desires to work closely with these organizations in the following years to provide more involvement opportunities and foster a sense of pride in the biomedical engineering community as a whole.

Development of Mentoring Programs & Increased Inter-Chapter Involvement

Two critical areas that our organization did not maximize its capability in this year include mentoring programs and inter-chapter involvement. Our vice president, Gabriella Shull, attended a meetup in New York City hosted by the Stony Brook chapter with numerous other chapters present. We hope to use inspiration from that meetup as well as input from our members to develop greater mentorship -based programs to better serve our chapter and the society as a whole. Moreover, we would like to witness increased inter-chapter involvement from our own side by reaching out to chapters at nearby schools and continual attendance at meetups. We attempted to organize a graduate school meetup at Cornell this past semester where we also planned to have lunch with the Cornell BMES chapter. Although this visit did not occur, we could like to make this attempt again as expand upon these types of efforts.

Encourage Members to Attend National Meeting

This was the first year that Binghamton University established an informational booth at a BMES national meeting which was geared towards informing the community about graduate programs and current research occurring at the University. We would like to encourage more members to attend the 2015 national meeting through increased advertisement and potentially establish a Binghamton University BMES student chapter informational booth of our own. This will enable members to be exposed to the latest research and to gain a taste of the professional society on a larger scale.