

Biomedical Engineering Society at UCF

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Welcome

It is with great pleasure to welcome you to the Biomedical Engineering Society at the University of Central Florida. The BMES at UCF serves as the lead society and professional home for biomedical engineering and bioengineering. Our leadership in accreditation, potential licensure, publications, scientific meetings, global programs, and diversity initiatives, as well as our commitment to ethics, all serve our mission to promote and enhance education in biomedical engineering.

We are an academic interdisciplinary group devoted to developing and using engineering/technology to enhance the health and well-being of others.

BME is a discipline of engineering that seeks to bridge the gap between engineering and medicine. By applying engineering principles and design concepts to medicine and biology, significant advances have positively impacted patient care.

The BMES at UCF is committed to connecting the

student body to the BME academic arena and promoting opportunities in education, networking, career development, and community service.

We hope that you will take advantage of the many benefits that come with membership to this growing organization and use the BMES chapter as a forum for the exchange of innovative ideas and a resource for current developments in biomedical engineering. Together we can shape a new academic community that shares the

Special points of interest:

- Chapter Meeting Schedule
- Meeting review and what's to come
- Involvement opportunities
- Executive council applications
- Survey/Feedback

Letter from the President

Dear fellow Knights,

Thank you for your continued support as we kick off our inaugural semester of the Biomedical Engineering Society at UCF.

Bridging the gap between medicine and engineering has been my lifelong passion. There are many avenues which one can take to build this frame-

work and I started this organization with hopes of sharing these possibilities with my peers.

It is my objective to expose students interested in medicine and engineering to the BME field and support the success of their future goals.

I am confident that together, we can successfully

build a new program and integrate this emerging discipline within the UCF community. I am excited to see what the future holds for the BMES at UCF.

Sincerely,

Adam Alexander

October 2015

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	★ 5	6	7	8	9	10
11	12	13	14	15	16	17
18	★ 19	20	21	22	23	24
25	26	27	28	29	30	31

Chapter Meetings

- 09/22/2015—First Chapter Meeting ft. Dr. Richard Sandler: Biomedical Acoustics Lab
- 10/05/2015— Chapter Meeting ft. Limbitless Solutions: myo electric prosthetics and 3D printing
- 10/19/2015— Chapter Meeting ft. Dr. Alain Kassab: UCF Biomedical Engineering Graduate Program & research initiatives
- 11/02/2015— Chapter Meeting ft. Dr. William De-Camp: Chief Pediatric Cardiovascular Surgery Arnold Palmer Hospital for Children
- 11/16/2015— Chapter Meeting: Professional Development
- 11/30/2015— End of Semester Social

Previous Meeting Re-Cap

We would like to extend a special thanks to our previous guest speaker, Limbitless Solutions. Dominique Courbin and Tyler Petresky showcased their 3D printed, myo-electric, prosthetic arm that has attracted national attention. Many students recognize the deep red bionic arm worn by actor Robert Downey Jr (aka Ironman). Limbitless delivered a 3D printed prosthetic arm modeled after Ironman's super-powered gauntlets to Alex, a 7 year old born with a partially developed right arm. Their project uses 3D printing to create cheap, electronic

prosthetics for children. Often, young people do not receive prosthetics simply because of the cost. Conventional prosthetics exceed tens of thousands of dollars. The 3D printed arm Alex wears, only cost \$350.

Students can be part of the Limbitless project and help manufacture arms for children in need. They utilize resources on campus, easily allowing students access to support. If you would like to learn more about 3D printing, prosthetic design, or becoming a Lim-



 limbitless
SOLUTIONS

bitless volunteer, don't hesitate to contact them and get involved!

Website

www.limbitless-solutions.org

Email

contact@limbitless-solutions.org

Upcoming Meeting 10/19/15

Our next meeting will take place at 7:00PM in the Student Union, room 218C. We will be hosting our faculty advisor, Dr. Alain Kassab. Dr. Kassab is an active professor in the UCF Mechanical & Aerospace Engineering department. He is the bioengineering department chair, responsible for the development of the upcoming Biomedical Engineering graduate program. His lead role includes constructing a BME curriculum for students seeking a MS or Ph.D. degree.

We are very excited to see this program finally take shape and soon be available to students. Future plans include a potential bachelor's program. Dr. Kassab will give us an update on the program's progress, expectations, and potential partnerships. Additionally, Dr. Kassab will describe some of his active BME research including computational analysis of cardiopulmonary fluid dynamics in patients with congenital heart disease and the biomechanics that influence

developmental hip dysplasia using 3D modeling techniques.

In the spirit of Halloween, costumes are encouraged for this meeting! Members are encouraged to test out their Halloween costumes before the big day. We will have Halloween themed snacks for all.



Involvement/Opportunities

Upcoming opportunities to consider:

Are you graduating in December 2015? How about May 2016? Do you have CAD experience? If you answered yes to any of these questions, ExamPlus is looking for a senior who is interested in working in the bioengineering field. If you are interested, contact Igor Volkov in the Office of Experiential Learning.

Igor.volkov@ucf.edu

2015 UCF MAE Leadership Conference—October 23, 2015 at 12PM

UCF MAE will host its first leadership conference to showcase the exciting activities of numerous MAE alumni, current students, and select initiatives of the MAE department. The conference is FREE for UCF students;

however, registration is required. Please register via the following link:

<https://www.ucfknightnetwork.com/MAEHomecoming>

“Opportunity is missed by most people because it is dressed in overalls and looks like work”

-Thomas Edison

Executive Council Applications

The officers of the BMES at UCF are looking to expand the executive council and are now accepting applications for various chair positions within the society. These are excellent opportunities to boost your involvement in the group and apply your ideas to help mold this new organization.

Available positions include:

- Public Relations Chair
- Social Media Chair
- Fundraising Chair

The responsibilities and expectations of each position can be found with the

application. Please review and consider these leadership opportunities. All applications are due by Sunday, October 18 at 11:59PM. Applications are available on our website (www.bmesatucf.com) and can be returned via email (ucfbmes@gmail.com) or in person to

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2015-2016

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Biomedical Engineering Society at UCF

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Mission: To build and support the biomedical engineering community locally, nationally, and internationally, with activities designed to communicate recent advances, discoveries, and inventions; promote education and professional development, and integrate the perspectives of the academic, medical, governmental, and business sectors.

Vision: To serve as the world's leading society of professionals devoted to developing and using engineering and technology to advance human health and well-being.

Survey

Your feedback is important to us! We value the aspirations of our members and would like to cater this organization to help develop your career in biomedical engineering. Please take a few minutes to complete this survey and provide your feedback. We are looking for what you as a member would like to see in this organization and how we can best prepare you to reach your goals.

<https://www.surveymonkey.com/r/RZLV32H>

