

UF Biomaterials Day 2015 Final Report

The student chapter of the Society for Biomaterials at the University of Florida held its fourth annual Biomaterials Day entitled “Innovative Biomaterial Solutions for Medicine and Technology,” on March 27th, 2015 in the Reitz Union Grand Ballroom. The one-day symposium consisted of a keynote address, speaker presentations from both faculty and students, a student poster session featuring the work of graduate and undergraduate students, and an industrial information session. The following report will highlight the purpose of Biomaterials Day, attendees, sponsors, speakers, and success stories throughout the event.

Purpose of the event: Biomaterials Day 2015 served several purposes. Foremost, Biomaterials Day at UF serves to enlighten a wide array of students about what biomaterials has to offer them and the potential career paths and other opportunities in both industry and academia. Secondly, the event was used to expand the biomaterials network at UF with other regional universities and companies actively involved in the biomaterials field. Our event achieved this goal by bringing professors from different universities and representatives from biotechnology companies to discuss advances in biomaterials in the engineering and medical fields. The UF student chapter of SFB focused on promoting the interaction between students, leading scientists, and developers in order to move the field forward.

Participants: Biomaterials Day 2015 had a total of 213 registered attendees including students, professors, and industrial professionals. The event had attendees from Florida International University, University of Central Florida, Purdue University, and the University of Florida. The majority of attendees were from different departments including: Materials Science and Engineering, Biomedical Engineering, Mechanical and Aerospace Engineering, Chemical Engineering, Agricultural and Biological Engineering, Environmental Engineering, Chemical Engineering, Chemistry, Biology, Molecular Genetics & Microbiology, Fisheries and Aquatic Science, Pathology Immunology, Agronomy, and the College of Dentistry.

In addition, academic presentations were given by representatives from Brigham and Women’s Hospital at Harvard Medical, the University of Delaware, Georgia Institute of Technology, and the University of Florida. Industry representatives included participants from RTI Surgical, Nanotherapeutics, Axogen, and BOSE electroforce.

Sponsors: Sponsors for Biomaterials 2015 included: the National Society for Biomaterials, the UF Office of Research, the UF Materials Science and Engineering department, the UF J. Crayton Pruitt Family Department of Biomedical Engineering, the UF College of Engineering, and Bose- Electroforce

Event Highlights: A welcome reception was held the evening before the main event for all of our speakers and sponsors. This was a casual reception where SFB student organizers, faculty, industry representatives, and guests met one another to discuss the events of the following day.

The symposium was kicked off by a welcome address given by Dr. Anthony Brennan, the Margaret A. Ross endowed professor of materials science and engineering, biomedical engineering, and the SFB student chapter faculty advisor at the University of Florida. The day consisted of a keynote address given by Dr. Jeffrey Karp from Harvard Medical entitled “Accelerated Medical Innovation,” and four talks given by faculty and researchers in the biomaterials field. We also had a student presentation given by Adam Monsalve, a fourth year Ph.D. student in Biomedical Engineering at UF, the winner of our student presentation competition held prior to the event. The event also featured a student poster presentation competition with 36 presenters, and an industry information session with industry representatives from Axogen, BOSE Electroforce, Nanotherapeutics, and RTI Surgical.

We served breakfast, lunch, and snack breaks to all registered guests, and we hosted a social event after the symposium to allow students and faculty to interact and network with each other, our speakers, and industry representatives over hors d’oeuvres. We used this time to hand out various awards to our student presentations winners and our generous speakers.

In addition, all registered attendees received goodie bags containing a wide variety of informational pamphlets, the event’s program, an SFB Biomaterials Day t-shirt designed by SFB students, and several promotional items from SFB and our sponsors.

Speakers: The following speakers gave presentations during Biomaterials Day:

- Jeffrey Karp, Ph.D., Brigham and Women’s Hospital, Harvard Medical
 - Accelerated Medical Innovation
- Kristi Kiick, Ph.D., University of Delaware
 - Biopolymer Conjugates for Production of Responsive Biomaterials
- Stephen Miller, Ph.D., University of Florida
 - Bioplastics vs. Traditional Packaging Plastics
- Clive Wasserfall, M.S., University of Florida
 - Biomaterials and Type I Diabetes
- Younan Xia, Ph.D., Georgia Institute of Technology
 - Putting Nanomaterials to Work for Biomedical Research

Student Presentations:

7 students composed of graduates and post-doctoral students competed in our student presentation competition held on March 17th. Each student prepared and presented a 15 minute oral presentation to the SFB student body. Each presentation was judged on various categories including academic merit, presentation quality, and presenter delivery. Adam Monsalve, a fourth year Ph.D. student in Biomedical Engineering at UF was our winner. He presented his talk during the symposium and won a cash prize.

36 students composed of undergraduates, graduates, and post-doctoral students presented their research at the student poster session. Maeve Budi, a graduate student in the UF Materials Science and Engineering Department, and Ha Nguyen, a graduate student in the UF Chemistry department tied for best poster presentations as judged by UF faculty. They were both awarded cash prizes.

Success Story: We feel that the biggest success of Biomaterials Day 2015 is the large increase in overall involvement and interest in biomaterials that we have seen over the past 4 years. Our first Biomaterials Day in 2012 brought in a little over 70 participants and consisted of speakers primarily from UF. We have seen participation in our event consistently grow each year with over 200 participants for both the 2014 and 2015 events. We have also grown enough to be able to bring in great speakers from across the country to inspire and invigorate our student attendees. Dr. Jeffrey Karp's talk this year received an overwhelming amount of positive feedback from our students, and we feel that these types of talks are pivotal in promoting the growth of the biomaterials field.

Feedback: We believe we were very successful in attracting over 200 participants for our fourth annual Biomaterials Day at the University of Florida. Overall, people were extremely satisfied with the event and commented on how the event has grown and improved over the years. Several faculty members and industry personnel commented on how impressed they were with such a large-scale event that was organized by SFB student officers.

Although we have increased and diversified the industry portion of our event, we feel that in we can do a better job of recruiting old and new companies to attend. We would like to be able to provide numerous employment opportunities for every SFB student member we have. We will keep contact with the current companies that have helped us, and we plan to build new relationships with additional companies over the next year.

Our goal for Biomaterials Day 2016 is to have over 250 registered attendees and 10 industrial partners. The following comments stand out from the survey that was sent to all attendees, and we plan on implementing many of their suggestions for 2016.

Favorite Aspect of Biomaterials Day 2015 taken from our feedback survey:

- Presentation from Dr. Karp was really good and informative.
- I enjoyed the presentation by Dr. Jeffrey Karp. Found it very interesting and inspiring
- I enjoyed the flexibility of the schedule. I could come and go to balance classes with Biomaterials day. I liked the setup of lunch, casual but still nice. The gift bag was nice. I really liked everything in it. The program was informative too.
- I really enjoyed the keynote speaker and how he focused on the innovation and future of biomaterials/biomedical engineering.
- Food was great, speakers were great, goodies were great! Best conference I have attended, keep up the great work!
- The organization and food were very good. Invited lectures are good too
- The presentations and the set-up of the event were all spectacular. The food was delicious, and giving everyone name tags made it a lot easier to socialize. Everything was well-organized. The shirts are also rather fashionable, and I am definitely going to be wearing mine.

Suggestions and improvements to be made for 2016:

- I would be interested in seeing larger companies attend such as those that are not just from the Gainesville area. Companies from elsewhere in the southeast region.
- It is quite short for 1 hour of the poster presentation because if we present the posters, we don't have time to see other posters. It would be great to have a certificate for the poster winner.
- Timing of the event conflicted with my classes, as it did for many of my peers, so figuring a date/time frame that suits more people would be best.
- Don't offer lunch same time as guest lecture. A little disrespectful to guest.
- Provide a little bit more space to look at the posters. I had a difficult time maneuvering around people to see each poster.
- A little more time for the poster event would be good. I felt like the poster session was a bit rushed

Contact Information: The following people and their contact information were involved in the planning of Biomaterials Day

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