UF Biomaterials Day 2014 Final Report

The student chapter of the Society For Biomaterials at the University of Florida held its third annual Biomaterials Day entitled "Engineering the Future of Medicine" on March 28th, 2014 at the Reitz Union Grand Ballroom, which is on campus. The one-day symposium consisted of a keynote address, seven speaker presentations from academia as well as industry representatives, a student poster session featuring the work of graduate and undergraduate students from the University of Florida and other regional universities and lastly, an industrial information session for career opportunities in the field of biomaterials. The following report will highlight the purpose of Biomaterials Day, attendees, sponsors, speakers and success stories throughout the event.

Purpose of the event: The purpose of Biomaterials Day 2014 was to create a network with regional universities and companies actively involved in the biomaterials field. Our event achieved this goal by bringing professors from different universities and industry 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 2014 had a total of 202 registered attendees including students, professors, and industrial professionals. The event had attendees from Florida International University, University of Central Florida, Florida Institute of Technology and Gainesville High School as well as the University of Florida. The majority of attendees were from the following departments: 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 University of Florida College of Dentistry.

In addition, the Senior Vice President and Chief Operating Officer of the University of Florida, Dr. Winfred Phillips, attended and gave the welcome address. Academia presentations were given by representatives from Florida International University, the University of Central Florida, the University of Connecticut and the University of Florida. Industry representatives included participants from Kimberly-Clark, Exactech Inc., Vistakon, RTI Biologics and the UF Office of Licensing Technologies.

Sponsors: In addition to the grant received from the national Society For Biomaterials, financial support was received from the University of Florida Office of Research, UF Materials Science and Engineering Department, J. Crayton Pruitt Family Department of Biomedical Engineering, Bose- Electroforce and Johnson and Johnson.

Event Highlights: A welcome reception for all of our speakers and sponsors was held the evening before the main event. This was a casual reception where SFB student organizers, faculty, industry representatives, sponsors and guests met one another to discuss the events of the following day. The theme of the day was "Engineering the Future of Medicine." The symposium was kicked off by a welcome address given by Dr. Winfred Phillips, the Senior Vice President and Chief Operating Officer of the University of Florida. The day consisted of a keynote address by Dr. Cato Laurencin entitled "Regenerative Engineering: The Theory and Practice of a Next Generation Field." Dr. Laurencin, who received the Technology Innovation and Development Award from the Society For Biomaterials in 2013, truly believes in mentoring and disseminating knowledge for the advancement of biomaterials research and has been awarded numerous prestigious mentoring awards. Following the keynote speech, there was a morning session consisting of four talks and an afternoon session consisting of three talks, a student poster session as well as an industry information session. Breakfast, lunch, and snack breaks as well as goodie bags containing a wide variety of informational pamphlets, an SFB Biomaterials Day t-shirt, and several other items, were provided to all registered attendees free of charge.

Speakers: The following speakers gave presentations during Biomaterials Day:

- Cato T. Laurencin, MD, PhD. University of Connecticut
- Gary Miller, PhD. Exactech, Inc.
- Sharan Ramaswamy, PhD. Florida International University
- Thomas Estes, PhD. Vistakon.
- James Hickman, PhD. University of Central Florida
- Stephanie Martin, PhD. Kimberly Clark
- Tanmay Lele, PhD. University of Florida
- Ken Anusavice, DMD, PhD. University of Florida

Student Poster Presentations: 21 students presented their research at the student poster session composed of 19 graduate students and 2 undergraduates. Three of the students came from FIU and one student from FIT. Matthew Carstens, a graduate student in the UF Biomedical Engineering Department, and Joseph Decker, a graduate student in the UF Materials Science and Engineering Department, were awarded the best poster presentation prizes.

"Success Story": The biggest highlight of our event was having Dr. Cato T. Laurencin, of the University of Connecticut, give the keynote speech. Dr. Laurencin emphasized the importance of biomaterials in the regenerative engineering field and how it has grown significantly and will be the next generation field. He highlighted the importance of biomaterials in the medical fields, quoting the event theme "Engineering the future of medicine." Dr. Laurencin is an elected member of the Institute of Medicine of the National Academy of Sciences and an elected member of the National Academy of Engineering.

Feedback: We believe we were very successful in attracting over 200 participants for our third 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 had several industry representatives attend, we feel that in the future we can do a better job of recruiting companies and advertising the event. We will keep contact with the companies that have provided their support throughout the years, and we plan to build new relationships with additional companies. Our goal for Biomaterials Day 2015 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 2015.

Favorite Aspect of Biomaterials Day 2014:

- "Quality of invited talks, Good poster session"
- "Overall, I felt the event was well organized. The Keynote speakers were also good. I will bring my students back next year."
- "Dr. Laurencin's talk was one of the best I've seen in such a setting. The
 poster session was really well organized, and was a great way to get a handle
 on biomaterials research happening at UF."
- "I enjoyed listening to the guest speakers, especially Dr. Stephanie Martin. I really liked hearing her story because it was encouraging for me as a freshman."
- "FOOD WAS AMAZING!!!!! My friends and I wear our shirts all the time and people always ask us about the Society For Biomaterials. It's a great conversation starter and easy advertisement!"

Suggestions:

- "You guys did a great job! I was particularly impressed with the professionalism of the event and how smoothly the event flowed. Perhaps, however, order more shirts?"
- "Continue this format, need to get more publicity out when such high profile speakers are speaking"
- "If student can have the chance for oral presentation"
- "Include a 5 min rapid research presentation competition for biomaterials. Have the final 3 present during a 15 min block during the Biomaterials days. Have the preliminary rounds a few days prior."
- "Speaker panels, breakout sessions, submitted questions"

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

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