# ISPE Boston Area Chapter Presents: Facility Optimization & Process Improvement

# Thursday, April 17, 2014

4:30 pm to 9:00 pm

**UMass Lowell** 

Emerging Technologies and Innovation Center 40 University Avenue Lowell, Massachusetts



Want to participate in the UMass Dartmouth program but the UMD campus is too far away? Have we got a great idea for you!

Join the Boston Area Chapter on April 17<sup>th</sup> at U Mass Lowell and be part of several ISPE firsts:

- Participate in the first ever simulcast of a Chapter educational program. If you've been to our recent educational programs, you may have noticed an A/V crew. They have been working out the details to prepare the Chapter to host its first simulcast educational program. There will be the customary networking reception followed by a live simulcast of the speaker's presentations and opportunity to participate in the Q&A. Many thanks for the Geographic Outreach (GO) Committee for making this happen!
- Be part of the first ever ISPE event being held at U Mass Lowell's brand new Emerging Technology and Innovation Center. Funded in part by the Mass Life Sciences Accelerator loan program, come see UML's brand new building.
- In another first the Chapter is presenting a top-notch educational program immediately following our Annual Student Poster Contest. Attendees will meet some of our best and brightest upcoming students as they present their research, with two winning posters funded to attend ISPE's Annual Meeting. Students will have the opportunity to network with the region's most committed professionals and experience the energy of a Boston Area Chapter event.

Like all ISPE educational programs, light food and beverage will be served. So join us, meet some students, watch a video tour of UMD's new MAB center and then participate in the first chapter simulcast, where you can interact with speakers at UMD.

Poster contest starts at 4:30, video tour of UMD and networking reception at 5:30, panel discussion at 6:30. Be part of another ISPE first!

**PROGRAM SUMMARY:** Biological products are expanding rapidly from classic mAbs to therapeutic proteins, conjugates, cell therapies and even tissues. Production technologies are evolving rapidly from stainless steel to single use to continuous processes. These changes offer process improvement opportunities not previously possible. Optimizing a production facility to simultaneously support a range of products and technologies, under an open access management approach, to support industry, research and education required many disciplines and compromises at every stage. You will tour the new Massachusetts Accelerator for Biomanufacturing (The MAB) and hear from the design, construction, university and industry team that developed the concept as well as the building.

WHO SHOULD ATTEND: Individuals interested in the challenges in designing and building a multi-product, multi-client facility which also must accommodate a wide range of production technologies, such as stainless steel fermentation, single use cell culture and incubated tissue regeneration, as well as those who face challenges in production that might benefit from experimentation in a GMP-like environment.

# **Facility Optimization & Process Improvement**

#### PRESENTATION:

MAB Facility: Optimization and Process Improvement Opportunities, Presentation and Panel Discussion

In the first hour, speakers will describe the collaborative origins, design, construction and trade-offs of the MAB from their distinct



perspectives of the University, industry/users, design and construction teams. The stories will emphasize the facility optimization and process improvements required for this novel, open-access multi-product, multi-client facility. The second hour will feature a moderated panel discussion with audience participation. Explore the design tensions that were balanced, the organizational collaboration required and the opportunities for continued technical improvement and community engagement in the MAB's future.

### **SPEAKERS** (In Order of Appearance):

#### Mark Trusheim, Co-Bio Consulting

Mark is President of Co-Bio Consulting and Bio-manufacturing Executive in Residence at the University of Massachusetts Dartmouth and a member of the Massachusetts Bio-Manufacturing Roundtable. In 2004 as Interim President and Board Member of the Massachusetts Biotechnology Council, Mark began working with the University of Massachusetts to develop public/private collaborations as part of an integrated strategy to advance biomanufacturing. The \$32M MAB is a key part of that strategy.

As an entrepreneur, Mark founded the diagnostics company Cantata Laboratories after 10 years at Monsanto/Pharmacia, culminating as Co-President and COO of Cereon Genomics, a \$500M collaboration with Millennium Pharmaceuticals. He is a former Special Government Employee for the FDA's Office of the Commissioner. Mark has degrees in Chemistry from Stanford University and Management from the MIT Sloan School of Management.

#### Paul Vigeant, UMass Dartmouth

Paul Vigeant is President of MAB Inc. and Assistant Chancellor for Economic Development at UMass Dartmouth. Paul has been involved in the conception and leadership of the MAB since 2004. He is also Executive Director of the SouthCoast Development Partnership.

#### Chris Brigham, UMass Dartmouth

Dr. Chris Brigham is an assistant Professor of Bioengineering at UMass Dartmouth. His interests are in metabolic engineering, biomanufacturing, and microbial physiology and genetics. He received his PhD in

Molecular Biology and Microbiology from Tufts University School of Medicine. He then worked as a postdoctoral researcher at MIT, where he studied biomanufacturing of sustainable alternatives to petroleum products using industrially significant bacteria with engineered, optimized metabolic pathways to synthesize value

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# **Facility Optimization & Process Improvement**

#### **SPEAKERS Continued:**

#### Chris Brigham, UMass Dartmouth

added products from surplus or waste carbon feedstocks. Dr. Brigham is interested in production of bio-based polymers and fuels using this type of sustainable process. He plans to utilize the MAB to teach Bioengineering students process development and control, hopefully



resulting in a "win-win" for UMass Dartmouth students and the biomanufacturing community that utilize the MAB.

#### **Steve Fitzpatrick, DPS Biometics**

Dr. Stephen Fitzpatrick played a leading role in the conceptual planning and design of the Massachusetts Accelerator for Bio-manufacturing (MAB) at U. Mass Dartmouth bringing to the project over thirty years of experience in the biopharmaceutical industry. Dr. Fitzpatrick is President of DPS Biometics, a Framingham, MA based engineering, architectural and consulting company focused on the biopharmaceutical industry. DPS Biometics is the lead design firm responsible for the planning and design of the MAB. Over the years, Dr. Fitzpatrick has consulted on the engineering development of several new medicines and technical advances stemming from the biopharmaceutical industry.

Dr. Fitzpatrick holds Bachelor's and Master's degrees in chemical engineering and a Doctorate in biochemical engineering from the University of Manchester, UK and is recipient of the Dista Biochemical engineering prize (Manchester University) and the 1999 Presidential Green Chemistry Award from the US EPA.

#### Sharon Jozokos, Suffolk Construction

Sharon Jozokos is a Project Executive for Suffolk Construction with more than 24 years of experience in the construction industry. Sharon has extensive experience in the science and technology sector, having played all roles during her career ranging from field superintendent to PX on projects valued up to \$200M for prestigious clients such as MassBiologics, UMass Dartmouth, Beth Israel, and MIT, to name a few. She has managed projects that have been instrumental in cancer and pharmaceutical research, development, and manufacturing.

Sharon was the construction team lead and ultimately responsible for the successful execution of the MAB project in partnership with all team members. A few of those responsibilities include identifying and managing construction milestones with the highest quality expectations, establishing and managing the construction budget, and ensuring we maintain a team approach. Sharon holds Bachelors in Construction Management from Wentworth Institute of Technology and a MBA from Boston College. She was named Woman of the Year by Wentworth in 2013, is a past president of NAWIC (National Association of Women in Construction), elected to the Wentworth Corporation in 2010, and is currently on the

board of the Giving Circle, a Suffolk employee run nonprofit foundation.

#### **MEETING MANAGERS:**

Joyce Chiu, CPIP, Honeywell Safety Products Paul Doherty, CRB Builders Brian Hagopian, Clearwater Consulting, Inc. Doyle Johnson, Hargrove Life Sciences, LLC Michael Severino, Festo Corporation



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#### **PROGRAM SCHEDULE:**

4:30 – 5:30 PM **Student Poster Contest** 

5:30 – 6:30 PM Registration & Networking Reception & Video Tour of UMD MAB

6:30 - 8:30 PMWelcome and Program

#### **REGISTRATION FEES:**

	Registration by 4/10/2014	After 4/10/2014
Members	\$20	\$30
Young Professional Members	\$5	\$10
Non-members **	\$45	\$55
Student Members	FREE	FREE

### **REGISTRATION IS NOW OPEN ONLINE!**

Don't waste time filling in the form! Register online at <a href="www.ISPEBoston.org/Events">www.ISPEBoston.org/Events</a>. Pay by credit card OR check.

Name:	Title:		
Do you wish to opt out of being I	isted on the attendee roster:		
Company:		Member #:	
		State: Zip:	
Tel:	Fax:	Email:	
PAY BY CREDIT CARD:	□ Visa □ MasterCard	☐ American Express	
Card #:		Expiration Date:	
Cardholder Signature:			

Payment may be mailed to: ISPE, Boston Area Chapter, 411 Waverley Oaks Road, Suite 331B, Waltham, MA 02452 Telephone: 781-647-ISPE (4773) M Fax: 781-647-7222 M Email: office@ispeboston.org

\* PLEASE NOTE: CANCELLATIONS RECEIVED AFTER April 10 ARE SUBJECT TO BILLING

<sup>\*\*</sup> Attendees may only attend one program as a non-member.

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#### **DIRECTIONS:**

For a map and door-to-door directions go to: <a href="http://www.uml.edu/maps/">http://www.uml.edu/maps/</a>

Click on Buildings, then Mark & Elisia Saab Emerging Technologies and Innovation Center (ETI). From there the interactive map will show you its location and best place for visitors to park.

