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MAY MEETING: ENGINEERING ADVENTURES FROM OUTER SPACE TO PATIENT SAFETY AND THEN SOME

JAMES P. BAGIAN, M.D.

**Director of the Center for Healthcare Engineering and Patient Safety
 University Of Michigan**

[WEBEX MEETING NUMBER 276 141 101](#) (further directions on page 6)

THURSDAY, 28 MAY 2015

9:00 pm EDT, 8:00 pm CDT, 7:00 pm MDT, 6:00 pm PDT;

UTC/GMT 0200 24 APRIL 2015



ABSTRACT: Dr. Bagian, a noted speaker, will share some of his career experiences from his diverse “jobs” as astronaut, engineer, doctor, and patient-oriented healthcare delivery expert.

SPEAKER: Dr. James P. Bagian is a physician and engineer who currently serves as the Director of the Center for Healthcare Engineering and Patient Safety at the University of Michigan. There he assembles and leads multidisciplinary teams from across the university

to employ a systems-based approach to improving the quality, safety, efficiency and value of healthcare provided to patients. He served as the first Chief Patient Safety Officer and Founding Director of the National Center for Patient Safety (NCPS) at the U.S. Department of Veterans Affairs (VA). He has also held positions as a NASA physician and astronaut, U.S. Air Force flight surgeon, and engineer at the U.S. Department of Housing and Urban Development, U.S. Navy, and Environmental Protection Agency. More information may be found on the [VLS Events Website](#).

IN THIS ISSUE: PAST, PRESENT, AND FUTURE THREADS

Jennifer I. Brand



This month we continue topics from recent VLS speakers and articles. First, however, let's look forward to what the VLS Leadership is planning. Our speaker this month is Dr. Jim

Bagian, whose career is a blend of traditional engineering and traditional medical sciences with a strong flavor of out-of-this world adventure from his astronaut days. In September, the VLS will sponsor a competition for students to share their industrial experiences. Details to follow.

In our continuing discussions, Chair Amanda Scalza resumes her seasonally-inspired reflections on people who contribute to successes – her own and the next generation's. Past Chair Noah Meeks ratchets up one level from his October 2014 article "Making the Most of the AIChE Annual Meeting". He shares his lessons

learned by actively participating in a national meeting as a session chair.

I would like to thank those who responded to my request for tales of non-traditional uses of chemical engineering degrees and encourage others to do so. (jbrand@unl.edu)

Last month Amanda talked about moving and making career transitions. I am enjoying such adventures now, as I once again drive halfway across our magnificent continent in my beloved teenaged Subaru. My electronic companions, including Mark Knopfler and Woody Guthrie, once again remind me of how the English language changes with time and space. So, in spite of my editorial in the February 2014 VLS newsletter, I will respect Amanda's freedom of expression in her word choices.

My music also reminds me of the power of the published word. In the spirit of furthering Noah's concept of productive discussions, I wonder where you readers stand on some of these topics. Please speak up! Don't be shy – open discussion of diverse ideas is crucial to creativity, which is really the essence of engineering.

FROM THE CHAIR: PERSONAL HEROES

Amanda Scalza

As children, we all have heroes. Our heroes might be book or television characters, celebrities or schoolteachers. Regardless of these outside influences however, for most of us, our real heroes are our parents. This month in America we celebrate Mother's Day, and in June, Father's Day. So this now seems the ideal time to reflect on the impact parents have on our careers. Although choosing careers often means following in the footsteps of a parent, or other role model, support for new engineers can come from anywhere. This month, I will reflect my own story, which shows how important non-engineers can be in helping us recruit and encourage the next generation of engineers.

I am a first generation engineer. In fact, I had absolutely no idea what engineer meant when I started my first day at university. Based on the old candy commercial (Good & Plenty), my friends at dance class thought it meant I was going to work on the train. My father, who was a manager at a trucking company, diligently took me to at least a half dozen universities on visits. We sneaked out of all but one as they droned on about things neither of us was sophisticated enough to understand. The school I chose, University of New Haven, was indeed the only one I applied



to. I think I had fallen in love with New England as much as the school itself.

Though they couldn't help me solve the equations as I labored through my chemical engineering and chemistry degrees, my parents listened tirelessly when I needed them. When my classmates and I convinced the AIChE to let our tiny school host the Northeast Regional Conference, my parents were there to help us print name badges, decorate centerpieces and cook us dinner. My mother has helped me through the long days starting out in operations, and while what half of what I say still may be another language to her, she has been a great advocate for our industry, which was much feared in our hometown. Though I did not follow in her career footsteps, my mother is certainly my hero.

During my time in Texas, I have completed a number of community outreach activities to spread the word about the benefits of engineering, both through my company and my local AIChE section. The engineering industry has long been lagging in recruiting diversity, and it will no longer be enough to depend on those following in their parent's footsteps to supply our engineering needs. As ambassadors of our industry, we all have a responsibility to engage the next generation of engineers, both students and parents. Creating a new generation of engineers, diverse in ideas, backgrounds, passions, and ways of thinking, will create a profession of sustainability and new innovation.

Though my path has taken me far beyond what my parents ever imagined, I

could not have made this journey without their support and encouragement. I am excited and inspired by the ever-increasing diversity in gender, ethnicity, and fields of study I see from the chemical engineering industry. I am proud of the progress that has occurred, and look forward to the innovation to come.

FROM THE PAST CHAIR: HOW TO CHAIR A MEETING SESSION

Noah Meeks

Chairing a session at the national meeting is a rewarding and educational experience, but it can also be daunting to first-time chairs.



AIChE session chairs have immense leeway to select speakers. By seeking speakers with varied perspectives who complement each other, chairs can facilitate productive, meaningful discussions and greater learning. Daunting aspects of chairing a session include getting the session organized, finding the right speakers, and time management during the session itself. Additional challenges may include poor attendance, speakers that don't show up, or speakers that are not considerate of the time. This spring was my third time chairing an AIChE session, with at least as many experiences in other conferences as well,

and there are some steps and lessons that I've recently learned.

1. Have a program idea. If there is a topic of interest, check to see if the upcoming national meetings already feature this type of program. If not, this is a great opportunity to start something new.
2. Get appointed as a session chair. Most programming at the national spring and fall meetings is done through divisions and forums (<http://www.aiche.org/community/divisions-forums>), and each division or forum has a program chair responsible for overseeing all the programs which that division sponsors or co-sponsors. Divisions which sponsor many sessions may divide their programming into areas, with separate area program chairs. These programming chairs can listen to the new ideas, or recommend involvement with an already-planned program.
3. Find a co-chair. All AIChE sessions have a chair and co-chair. Sometimes these two folks work together throughout the planning process—other times the co-chair will just be there in case an emergency arises. If you are appointed to a session by the programming chair, rather than coming up with a new idea, it's likely that the division or forum will have a co-chair already assigned.
4. Recruit or select speakers. Decide the proportion of invited speakers and speakers selected from abstract solicitations you want for productive discussion. Invited speakers bring special expertise or

name recognition, and may enhance more productive discussions.

However, it is important not to overlook emerging work. Therefore a mixture of invited and submitted talks has been the best approach for my sessions. Look to colleagues in industry and academia, friends and former classmates, and recently published authors that may be appropriate at your session.

5. Once the speakers are selected, contact them. Give them the tentative agenda for the session so that they can plan early and prepare their presentations considering the time and the other speakers. This should be done as early as the speakers are confirmed and the agenda is set. AIChE also puts out speaker guidelines and other documents to send to them.
6. Contact the speakers again before the session. About two weeks before the session, confirm with each speaker again and note any special requests. Note the room location and request that they arrive early or send their slides in advance.
7. Prepare a 2-3 introductory slides to your session which give an overview of the topic, the speakers and the sponsoring division(s) or forum(s). The division programming chair may provide these slides or at least a template.
8. Arrive early with laptop and a power cord. Those batteries just

tend to go down during someone's talk!

9. Once at the session, relax and enjoy! If someone doesn't show, ask others to extend their talks or open the time up for discussion. The attendees are all intelligent people with something to say, and they have all kinds of thoughts and creativity. I generally recommend against asking speakers to go early, as some folks may only attend the session for that talk.
10. Follow up with the speakers to thank them, let the program chair know the attendance and any speakers that did not show up.

MARK YOUR CALENDAR

VLS Meetings are the fourth Thursday of the month:

---- Thursday, June 25th ----

Mark Jones, DOW (History Series)

Thursday, July 23rd

Thursday, August 27rd

AIChE Presidential Candidates

Thursday, September 24th

Student Paper Competition

--- Thursday, October 22nd ----

Vice Admiral Joseph Dyer, USN (ret)

2015 is European Industrial and Technical Heritage Year

ATTENDING A VLS MEETING

- **Join by internet:**
 - <https://aiche.webex.com/aiche/j.php?MTID=m8a0766c5d03559acce05542a78513954>
 - Meeting number 276 141 101

- **Join by phone:** Access code: 276 141 101
 - 1-866-469-3239 Call-in toll-free number (US/Canada)
 - 1-650-429-3300 Call-in toll number (US/Canada)
 - [Global Call-in numbers](#)
 - [Toll-free calling restrictions](#)

Attendance at a Virtual Section Meeting is open to AIChE Virtual Local Section Members, AIChE members and other interested people.

PDH CREDIT FOR VLS MEETINGS

LAURA J. GIMPELSON, P. E.

Attendees of the Virtual Local Section Meetings can receive up to 1 hour of professional development credit that meets the continuing education requirements of most state professional engineering registrations. To receive the certificate documenting your attendance, send an email to the VLS secretary, Laura Gimpelson, at virtualaiche@gmail.com.

Include the following information in your email:

1. Name of the Presentation and Speaker
2. Attendee's name as listed on the registration certificate
2. Attendee's registration number and state/providence of issuance

The certificate, in pdf format, will be issued within 30 days of the receipt of the request.