The 2016 AIMBE meeting was their 25th anniversary meeting, with the theme of advocacy and engagement. The meeting consisted of a Saturday night “invite only” celebration reception with past presidents, a Sunday of scientific talks, a meeting of the Council of Societies (at which I represented AAPM), an evening banquet, and a Monday of policy-related talks and historical talks as well as the induction ceremony of the new fellows. The meeting drew approximately 400 attendees; the largest ever.

AAPM was well represented among the new Fellows, including many AAPM members (see photos and attached pdf listing all the new 2016 AIMBE Fellows).

AIMBE is the main honorific society for biomedical engineering. Throughout the meeting, AIMBE's role in the establishment of the NIBIB was repeatedly mentioned, along with noting the ARR.

AIMBE strategic has three main areas of focus on biomedical engineering: (i) recognizing excellence (via the AIMBE fellows), (ii) strengthening public policy, and (iii) advancing public understanding.

In strengthening public policy, AIMBE has:
- AIMBE Advocate, which is an easy method with which to write a letter to your congressmen
- The AIMBE Public Policy Institute
  - 2-day training on regulatory policy for the future
- AIMBE FDA Scholars Program
- AIMBE contributes to FDA Network of Experts
- AIMBE NIH workshop on in vitro tools for preclinical drug discovery process

In advancing public understanding, AIMBE has:
- Public outreach via stories on their website
- Navigate the Circuit, which is a comprehensive website to educate students about MBE career pathways
  - Navigate.aimbe.org
- AIMBE voice initiative

AIMBE also provides for:
- Class projects
- Summer interns
- Global health fellows
- Partnership

The scientific talks were very interesting and well presented by leaders in the field. All were in biomedical engineering, and not imaging/medical physics. The schedule is attached. AIMBE is to be applauded for such an outstanding program of scientific speakers, although it would have been more relevant to include imaging, a major arm of many BME programs.

At the meeting of the Council of Societies, around 15 societies were represented. I represented AAPM. See the attached agenda. Relevant information for AAPM includes:
- Use of the AIMBE's FLASH government newsletter. It is free to each of the member societies and AAPM can link to it from the AAPM website. It provides regular concise updates on
government and regulatory issues. [a society could even have their name added, along with AIMBE, on the newsletter that goes to then AAPM members]

• If AAPM ever wants to visit a congressman, AIMBE will help. Note that the CEO of AIMBE is a “Washington DC insider”.
• AAPM can also use, and also customize, the AIMBE website tool to have individuals email their congressman or set up a visiting appointment.
• AAPM can nominate members for Fellow and also candidates for the Pierre Galletti Award.
• Does AAPM have a link to the AIMBE website on the AAPM website?
• Member societies were asked if they would fund (up to $100,000) an AIMBE FDA Scholar. If funded by a society, the FDA scholar would work in an area relevant to the AAPM interests. Could AAPM get industry to help cover?

On Monday, France Cordova, director of NSF presented on how basic science research from NSF resulted in various translated developments, such as basic science research in NMR resulting in clinical MRI scanners, CRISPR, optogenetics, and lensfree computational microscopy. She also discussed NSF’s initiative called I-Corps, which is a public private partnership for innovation and to assess the translational potential of new basic science developments.

Presentations by Christine Schmidt (Chair of the College of Fellows) and Milan Yager (CEO of AIMBE) stressed the “power of one”. When you talk to your congressman, they don’t want lots of data, they want to hear stories. The strongest words in Washington DC are “I want to tell you a story”. Various examples were given, including how when Yager was the chief of staff for a congressman and how a smoking air flight resulted ultimately in the elimination of smoking on airplanes and how the flight attendant told the congressman -- I can’t do anything about this flight but you can do something!

A congressional insiders panel was held and covered discussion on the Cancer Moonshot program, the BRAIN initiative (with other government programs including those from DARPA, IARPA, FDA, DOE, and private sectors), and a 20% cure initiative including discussions on the breakthrough process at FDA.

A presentation was given by Christopher Austin, the NCATS director. Translational science is the field of investigation focused on understanding the scientific and operational principles underlying each step of the translational process. NCATS studies translation as a scientific and organizational problem. NCATS stresses the “3D’s”: Develop, Demonstrate, and Disseminate. NCATS is the only institute at NIH that does NOT do basic science.

In celebration of their 25th anniversary, an AIMBE history panel was held including historical stories and photos and suggestions for the future.

The meeting ended with a talk on publishing, where the speaker noted that their IT costs have surpassed what their publishing costs use to be! More and more papers are being written and submitted. Issues included:

  o Needing to stay current on facebook, twitter, all platforms
  o open access environment
  o asymmetric opportunity and complex application
  o author as customers
AIMBE Annual Meeting, April 2-4, 2016 in Washington DC
Report from Maryellen Giger, AAPM liaison to AIMBE

- emerging world of big data
  - to tell universities who is publishing where
- author & review identity metadata
  - not just corresponding author
- supplementary information and discoverability
  - some have supporting data: lab sheet 1, lab sheet 2, ...
  - Will be too difficult to data mine in the future
- machine generated data
  - where does it belong
- peer review and reproducibility
  - with more and more submissions, more stress on reviewers
- data mining: standards and service level expectations

Overall, the AIMBE meeting was excellent and relevant to the mission of AAPM. I recommend that we look at where AAPM could benefit from AIMBE in enhancing the AAPM mission.