

Biomedical Ultrasound/Bioresponse to Vibration Technical Committee Meeting
May 21, 2009 7:30 PM
Portland, OR

1. Welcome of New Attendees

About 50 in attendance. First time attendees introduced themselves.

2. Google Mail List

You can sign up for the BB mail list by sending an email to:
ASA_BBTC-subscribe@googlegroups.com

This is a separate email list from that maintained by the ASA.

Minutes are available at: <http://moab.eecs.wsu.edu/~shira/asa/bubv.html>
and: http://groups.google.com/group/ASA_BBTC

List of special sessions for past 5 years is also available on the ASA_BBTC page on Google groups.

3. May 18-22, 2009 Portland, OR

Congratulations to:

Kelley Garvin who was awarded Best Student Paper Award for her paper "Ultrasound standing wave fields control the spatial distribution of cells and protein in three-dimensional engineered tissue."

Thanks to:

TPOM representatives
Azzdine Ammi and Peter Kaczowski

Special Session Organizers and Chairs
[Image enhancement and targeted drug and gene delivery](#)
Azzdine Ammi and Saurabh Datta
[Biomedical applications of standing waves](#)
Armen Sarvazyan
[Medical ultrasound imaging with high frequency and/or contrast agents](#)
John Allen and Jonathan Lindner
[Shock wave therapy](#)
Michael Bailey and Thomas Matula
[Metrology and calibration of high intensity focused ultrasound](#)
Peter Kaczowski
[Biomedical applications of acoustic radiation force](#)
Mostafa Fatemi

BB session chair
Azzdine Ammi

Thanks to:
Student Council Rep

Lucie Somaglino
ASACOS
Peter Kaczkowski and Vera Khokhlova
Web coordinator
Shira Broschat - (<http://moab.eecs.wsu.edu/~shira/asa/bubv.html>)
Membership Committee
Christy Holland
Medals and Awards
Lawrence Crum
BB Associate Editors
Charles Church, Floyd Dunn, and Doug Miller

Comments about the meeting? HVAC really loud, some AV problems

4. Student Council Report

Lucie Somaglino updated the TC on a few topics:

1. San Antonio will be the end of Lucie's two year term and we will need to elect a new student rep at that time. Nominations for new students are encouraged and can be sent to the Chair. The student rep commits to sitting on the student council for two years and attending the four ASA meetings over those two years. The nomination should be made by the student's adviser and include a letter stating that there will be travel support for the student over the two years served as the BB rep.
2. Nominations for student mentor awards are due before the Baltimore meeting. Information is on the student council website. <http://www.acosoc.org/student/> The award will be presented in Cancun.
3. There is a student council Twitter group ASASTUDENTS.
4. The student social on Wed evenings is open to all conference attendees. The Portland social was very well attended.
5. At each meeting, one student from each TC can win the chance to go to the Fellow Luncheon with a "senior" Fellow from that TC. Names are chosen at the Student Reception on Wed night and the luncheon is Thursday afternoon. At the Portland meeting, Ben Yano won the BB raffle and Christy Holland acted as the host.

5. ASACOS (Standards)

Peter Kaczkowski and Vera Khokhlova are now sharing ASACOS duties. Peter discussed what role BB should be in regards to ASACOS and international standards. Sentiment was that standards development is not appropriate within ASACOS, but the ASA should attempt to have visibility and input in international standards. Mark Schafer has agreed to act as the ASA liaison at IEC meetings on standards.

Wes Nyborg stepped down as Chair of S1/WG 22 "Bubble Detection and Cavitation Monitoring" and this working group is no longer active. If anyone would like to take over as chair, please contact Peter, Vera, or Jeff.

6. October 26-30, 2009 San Antonio, TX

Special Sessions (these are in call for papers):

[Molecular ultrasound imaging](#)

Stanislav Emelianov

[Multiple scattering of waves: From theory to application](#)

Guillaume Haiat and Purnima Ratilal

BB Co-sponsored Sessions (these are in call for papers):

[Light and sound in science, engineering, and medicine \(PA\)](#)

Ron Roy and Joel Mobley

[40th anniversary of the KZK equation \(PA\)](#)

Vera Khokhlova and Mark Hamilton

[Structural acoustics in biological media \(UW\)](#)

TPOM Rep (July 10-11): Mark Wochner and ½ Mark Hamilton

7. April 19-23, 2010 Baltimore, MD

Submitted Special Sessions:

[Ultrasonic characterization of bone](#)

Keith Wear

[Ultrasound induced cellular bioeffects](#)

Carr Everbach and Stu Mitchell

[Numerical modeling of medical ultrasound.](#)

Robert McGough

[Ultrasonically Activated Agents](#)

Oliver Kripfgans

[Acoustic propagation in the brain, imaging and therapy for traumatic brain injury](#)

Steve Kargl and Tom Matula

TPOM Rep (Dec11-12): Subha Maruvada and Carr Everbach

8. Nov 15-19, 2010 Cancun

Tentative Special Sessions

[Biomedical applications of time reversal acoustics](#)

Armen Sarvazyan and Matthias Fink

[Doppler applications in medical ultrasound](#)

Jonathan Mamou and Michael Oelze

[Image guided therapeutic ultrasound](#)
Tyrone Porter

[Ultrasound contrast agent topic](#)
Azzdine Ammi

TPOM Rep: Your name could be here.

9. Spring, 2011 Seattle (Tom Matula is the Chair)

Tentative Special Sessions (additional sessions are welcome):

[Subharmonic Contrast Agent Topic](#)
Michel Versluis and Jeff Ketterling

[Photoacoustics Imaging](#)
Parag Chitnis and Ron Silverman

[Biomedical applications of acoustic standing waves](#)
Armen Sarvazyan and Martin Wiklund

TPOM Rep: Azzdine Ammi

10. ASA List Server

There is a proposal to implement a moderated list server to distribute emails to ASA members. There would be a general list, lists for TCs, student council, etc. Mails would be archived, nonmembers could sign up for the lists, and most actions would be automated. Transition would be transparent as far as members are concerned.

The technical council gave the OK to the proposal to move email handling to a list server. It will likely be 6-12 months before any changes are made because the technical issues will now need to be worked out.

11. Hot Topics in BB in San Antonio

BB will have a hot topics talk in San Antonio. The Hot Topics talks are meant to be somewhat broad and highlight up and coming topics of research.

The topic of photoacoustics was suggested along with two potential speakers. The topic of drug release with ultrasound was also suggested.

12. Student Paper Award

[Tyrone Porter](#) has agreed to act as Chair of the Ad Hoc BB and PA Student Paper Award Committee and [Mark Wochner](#), [Kim Lefkowitz](#), and [Matt Poese](#) have agreed to assist.

BB and PA proposed a new model for student paper competitions in order to make judging more uniform and provide a means for students to get more direct feedback regarding their work. (Each TC will have its own award.) The still-in-a-state-of-development competition may require that a student present an oral paper AND a poster in order to be considered for the student paper award. The poster would be the basis of the judging and there would be 5-8 judges that evaluate the posters and then meet to discuss the

ranking of the posters. The poster session would be listed in the official program and would be open to all conference attendees. Oral presentations would fall into various sessions, just as they do now.

The goal is to provide a more uniform means of judging and to permit more direct interaction between the students and judges. BB and PA are hoping to implement this method of awarding the student paper award in Baltimore. The Student Paper Award has traditionally only been given at the Spring meeting.

There was a lively discussion on the merits of a poster competition format with concern expressed for the extra work it would entail, the extra cost to print posters, and whether a poster session would be well attended. If the current format is maintained, it was suggested that the judging forms have a mechanism to provide feedback to the student. It was pointed out that Bob Apfel had suggested a number of years ago that ALL presentations be graded but this seems like a long shot to implement and would probably create a backlash ;).

13. NIH Manuscript Submission System

NIH requires submission to Manuscript Central of accepted peer-reviewed manuscripts related to NIH funded work. AIP will now submit the final published manuscript on the behalf of the author. You do not need to submit anything yourself. There will be a box that you check to indicate NIH support when you submit your manuscript to JASA. The full list of journals that handle submission on the author's behalf is at http://publicaccess.nih.gov/submit_process_journals.htm.

14. JASA Page Charges

Very important that we pay JASA page charges because it is vital income for the society. Page charges directly support the ASA and are not disappearing into a hole. Especially important now that the ASA needs to pay a cost to meet the NIH requirement to make articles publicly available on PubMed. This costs the ASA about \$100/paper.

15. Submission to JASA

The Editor in Chief, Allan Pierce, has a concern that the number of abstracts presented at ASA conferences far exceeds the number of submissions to JASA. By his estimate, only about 20% of papers presented at meetings get submitted to JASA. He was interested to know if there were any comments on this trend and whether it reflected a reluctance to submit to JASA.

The discussion was very brief on this topic, and it was noted that many papers represent incremental progress or new work. For this reason, a large number of papers presented at meetings do not represent mature work that is ready to publish or "not ready for prime time" in the language of television shows.

A question was asked about the acceptance rate in JASA and Allan informed me that the overall acceptance rate for JASA is about 60%. For BB related topics, the acceptance rate is slightly higher and is near 70%.

16. Short Courses and Tutorial Lectures

Short courses are 8 hours over 2 days (Sun and Mon). \$200 pre-registration

Tutorials are 2 hour intro lectures (usually Mon night) \$15

San Antonio - Short course on "Acoustical Imaging Applications: Seismic, Underwater, Biomedical, and Speech". **Dr. Christy Holland** will be a speaker.

San Antonio - Tutorial on "Podcasting Demystified: From Concept to Production for Every Budget" (Dr. Kathleen King)

Ideas for future topics can be sent to Lily Wang.

17. Hot Topics for Short News Stories <http://www.aip.org/dbis/>

The ASA is looking for interesting acoustical work to profile in short news reports that appear on local news or captive news feeds on buses, schools, etc. This is a news feed called Discoveries and Breakthroughs in Science. Will be posted on web site with video clips and distributed broadly. Ideas can be passed to me and I will forward them on.

18. ASA-AIP Congressional Fellowship

Looking for Applicants. Fellowship starts at the beginning of the Academic Year. Information on how to apply is provided on the AIP web site:

http://www.physicist.org/press_release/fellowships.html

You can apply on-line via this site.

19. Update scope of BB

We've been asked to update the description of the TC and PACS; reclassification may follow.

This is now our official scope!!!!!!!

"Includes, but is not limited to, the effects of hand-arm vibration, the effects of whole-body vibration, touch as a communicative sense, impact, and the effects of infrasound and ultrasound."

Scope as listed on BB website:

Diagnostic ultrasound--interests include the response of individuals to the stimulation delivered in ultrasonic exposures for the purposes of diagnosis, the most common example of which is the routine use of ultrasound in pregnancy. Efforts in this area concentrate on determining whether such exposures cause harm to the individual, and on describing the specific nature of injury. Researchers in this area are also involved in the development of safety criteria for the administration of diagnostic ultrasonic stimulation.

Therapeutic ultrasound--interests include the response of individuals to the stimulation delivered in ultrasonic exposures for the purpose of remediation of an existing condition, for example in lithotripsy, the destruction of kidney stones via ultrasonic stimulation. Efforts in this area include describing the action of the ultrasonic stimulus in heating and disintegrating the targeted structures, and any effects of the stimulus on surrounding tissues. As above, researchers in this area are concerned with the development of safety criteria for the use of therapeutic ultrasound.

Ron Roy, Christy Holland, Charlie Church and Doug Mast have agreed to serve on an Ad Hoc Committee to draft a new scope for BB. It will be ready in time for San Antonio with the hope that the scope can be finalized at the Baltimore meeting in Spring 2010.

20. Technical Committee Name

Larry Crum raised the issue that perhaps it would be appropriate to change the name of the TC to reflect the current research scope of the TC. While we do not wish to alienate those working in bioresponse to vibration, bioresponse represents a small fraction of JASA articles and meeting abstracts, and the current

TC name implies equal representation. Suggestions for new TC names included Medical Acoustics and Biomedical Acoustics. A point was made that we are competing with other societies with strong components in medical ultrasound/acoustics and that we should present our TC as being aligned with and encompassing the research areas covered in those societies.

A discussion ensued with the general consensus being that a name change was reasonable, but that we should move slowly to make sure all voices are heard. This topic will need to be discussed at future meetings and the above Ad Hoc Committee will continue to explore this issue as it relates to the draft of the new BB scope description.

21. Other business

Dick Stern has indicated that a full issue of Acoustics Today can be devoted to work in one TC. This would involve three contributions from BB. If anyone from BB would like to contribute to Acoustics Today please contact me. Once we have three suggestions for articles, I can request a BB issue of Acoustics Today.

Gail ter Haar reminded the attendees that there will be a Summer School on Therapeutic Ultrasound on Sep 28-Oct 2, 2009 in Cargese, Corsica, France. A number of ASA members are instructors at the summer school and it is an excellent environment for an immersion in therapeutic ultrasound. <http://www.loa.espci.fr/therapeutic2009.htm>

22. Meeting Adjourned at 8:40 pm

Jeff Ketterling
Chair of Biomedical Ultrasound/Bioresponse to Vibration