

Biomedical Ultrasound/Bioresponse to Vibration Technical Committee of the  
Acoustical Society of America  
Technical Committee Meeting  
November 30, 2007  
New Orleans

7:40 Meeting called to order  
33 people present

## 1. New Orleans November 2007

Congrats to

New Fellows -Glynn Holt

Acoustics Education Prize – David Blackstock

**\*\*\*PLEASE nominate others for fellowship, Rossing teaching award, student mentor award, ASA writing award,**

For this meeting

Thanks to

TPOM representative -- Charlie Church

ASACOS rep Jeff Ketterling

Medals and Awards Lawrence Crum

Membership Charlie Church

Web coordinator

Shira Broschat - (<http://moab.eecs.wsu.edu/~shira/asa/bubv.html>)

Special sessions:

Topical ...Tissue-response to acoustics and vibrations – Tyrone Porter,

Stable Cavitation –Saurabh Datta, Glynn Holt

Biomedical Applications of Acoustic Radiation Force Mostafa Fatemi

Contributes Session Chair Jeff Ketterling

## 6. ASACOS update by Jeff Ketterling

There is a marine mammal standards group. Those interested contact Jeff [ketterling@rrinyc.org](mailto:ketterling@rrinyc.org) He can put you in touch with Susan Blaeser [sblaeser@aip.org](mailto:sblaeser@aip.org).

Also, the hydrophone standard will be re-evaluated and related to this there is interest in developing a HIFU calibration standard. The TC thought Peter

Kaczkowski and Gail ter Haar as the possible chairs of this committee. There was a similar committee in the past headed by Wes Nyborg. Instructions for starting a working group are on the website.

As a start to this effort, there is a special session in Paris on this topic, a joint session with EA in Miami, and a session proposed tentatively for Portland.

## **7. Student Council**

Student Council reps travel for 4 meetings. ASA provides \$500 travel support for each meeting.

The following students were nominated to be the BB student council rep. Congratulations to all who were nominated. Also thank you to mentors who nominated students.

The nominating committee summarized the CVs of the students and all in attendance voted at the TC meeting.

The nominating committee was Jeff Ketterling (chair), Constantin Coussios, Neil Owen, Michael Canney. Tyrone Porter had to recuse himself because he nominated a student.

The CVs presented below is a draft that was refined at the TC meeting.

### **Jonathan Kracht**

Jon is currently a Ph.D. candidate at Boston University in the Department of Aerospace and Mechanical Engineering. He received a B.S. in Mech Eng. from Johns Hopkins University in 2006. His current research involves investigating failure mechanisms of kidney stones undergoing shock wave lithotripsy and utilizing an array of piezoelectric elements to track and target kidney stones in order to increase treatment efficacy during translatory motion due to human respiration. Jon's interest include pipe organ restoration and jazz piano.

### **Lucie Somaglino**

Lucie is currently a Ph.D. candidate in Medical Acoustics at INSERM U556 and University Claude Bernard, Lyon, France. She received a Masters 1 in Fluid Mechanics and Energy in 2006 and a Masters 2 in Physical Acoustics at the University of Paris in 2007. Her current research interests include development of novel sonosensitive liposomes for targeted ultrasound mediated drug delivery. Lucie's interests include guitar and photography.

### **Peng Zheng**

Peng is currently a Ph.D. candidate at Boston University in the Department of Aerospace and Mechanical Engineering. He received an M. S. in Acoustics, Institute of Acoustics, Department of Electronic Science and Engineering, Nanjing University, China in 2007.

Lucie Somaglino was elected to be the Student Council Rep. Congratulations Lucie.

## **8. Student Council Report** by Mike Canney

SC meeting was a busy, popular success. The icebreaker the first day was less well attended.

SC held a successful fellowship/grant writing workshop.

SC sponsors grant writing sessions. Christy Holland offer to contact Hector Lopez of NIBIB to speak.

Tom Matula reminded students to take advantage of POMA and publish their presentations online.

Students were also reminded to apply to PASS (physical Acoustics Summer school) due Feb 11.

Students were also reminded to take advantage of the meet students for lunch. The Paris organizers are trying to help Dr. Blackstock expand this effort for that meeting. Contact Dr. Blackstock sooner rather than wait incase he gets swamped at meeting time.

Also look on both the ASA and ASA student council websites for help planning Paris travel.

## **2. Paris, France. Jun 30-July 4 2008 (joint with EAA)**

This is a draft list, the actual sessions are in the call for papers.

Light and Sound Ron Roy, Emmanuel Bossy

Transducers for imaging and therapy- Jeff Ketterling, Marc Lethiecq

\*Microbubbles for imaging and therapy – Bouakaz, Church (descriptive sentence describes this session as providing “framework”)

Ultrasound Contrast agents – Tyrone Porter, Eleanor Stride (specific applications)

\*HIFU- Chapelon Crum (clinical)

HIFU Metrology and standards – Peter Kaczkowski, Gail ter Haar (metrology)

\*Theoretical and computational models of ultrasonic propagation in bone – Padilla, Wear (theory)

Ultrasound characterization of bone Jim Miller (measurement)

Shock waves in medicine Robin Cleveland, Oleg Sapozhnikov

Note under Signal Processing

Topical meeting on Time-Reversal Applications Dave Chambers, Claire Prada

And under Physical Acoustics

Bubbles- Carr Everbach and Tom Matula

TPOM Rep: Neil Owen E Bossy (Jeff K)

Abstracts due Jan 10 2008

Notified of acceptance Jan 21

Feb 15-16 2008 TPOM in Paris

Feb 8 end early registration

Process; register (don't have to pay), submit abstract, receive acceptance (should receive in days or could be as late as Jan 21), then complete registration and pay. (One person can be corresponding author on 2 papers, but somehow you have to follow acceptance with connecting the paper to your registration.)

Optional proceedings paper due Apr 30 2008

all talks are 20 min.

All sessions will have contributed papers and invited papers as with ASA meetings.

### **3. Miami Nov 10-14, 2008 meeting (mid Nov)**

Final special sessions:

Ultrasound assisted drug delivery – Saurabh Datta

Also listed under PA, Nonlinear Acoustics – Murray Korman

Under Engineering Acoustics, Metrology and calibration

We will need to find a rep at the Paris meeting for the Miami TPOM.

### **4. May 18-22, 2009 Portland OR**

special sessions:

Acoustic radiation force – Fatemi

Stable Cavitation – Holt, Datta

Opto-Acoustics – Ron Roy, Tanya Khokhlova

High frequency and contrast agent imaging – Jeff Ketterling, John Allen

Standards in HIFU – Peter Kaczkowski, Gail ter Haar

Shock Wave Therapy – Mike Bailey

Time Reversal – Armen Sarvazyan

### **5. Other Meetings**

ISNA Jul 7-10 2008 Sweden... Abstracts Dec 18

BIROW <http://www.birow.org/> Bioengineering & Imaging Research Opportunities Workshop  
**January 17 -19, 2008** The result of the workshop is a highly publicized white paper, and the more ultrasound we can get into it, the better.

**Abstracts due Dec 19**

Immediately following the Paris meeting, Stephen Meairs, will hold a sonothrombolysis conference in Germany. [www.sonothrombolysis2008.com](http://www.sonothrombolysis2008.com)

ASA Fall 2009 Austin or San Antonio  
ASA Spring 2010 Washington DC  
ASA Fall 2010 Cancun

## 9. BBTC Chair

We will elect a new chair at the Paris meeting.

Send nominations to me [bailey@apl.washington.edu](mailto:bailey@apl.washington.edu)

Nominating committee of former chairs will select 2 or 3 and the TC will vote in Paris.

New chair should attend the Technical council meeting Friday in Paris and start in Miami. Term is 6 consecutive meetings.

## 10. Student paper award every spring meeting

Rules

Details are listed in the spring call for papers

Up to 12 months after graduation

Student must present the paper and be first author

Student must submit power point to the ASA papercopying website

\$300 1<sup>st</sup>, \$200 2<sup>nd</sup> (might be a little different at Paris)

students can win more than once

students must sign up when submitting an abstract to the conference

**Change** OR contact the BBTC chair and request to be considered for the award anytime before the presentation. Students can even request being scored at the beginning of their talk. Chair reserves the right to refuse if in his/her judgment there is not sufficient time to add the student or insufficient scorers for these late requests.

**STUDENTS PLEASE introduce your talk as a student talk.**

## 10. JASA

1. If all old JASAs were available on 1 DVD in PDF for ~\$100, would you buy it?

1/3 yes in general

\_ yes if fully searchable

Christy suggested utilizing smart searches already used by UMB and extending these to the other ASA technical areas

2. Should Acoustics Today be available online?

All votes in favor

To everyone or just ASA members?

All voted for availability to everyone, seeing AT in an outreach role.

**Increase number from 4 to 6 per year?**

\_ against

the rest abstained

## **12. Other business**

### **Undergrad program**

Tyrone Porter announced he, Anthony Atchley, Charles Schmidt, and others are pursuing NSF funding to support undergrad summer research.

Tyrone welcomed involvement in the proposal as well as in offering to host students.

The effort would in particular target undergraduates at traditionally Black Colleges and Universities.

The effort would be a way to possibly increase ASA membership.

Funding would be pursued to send students to and ASA meeting to present their results.

## **13. Adjourned at 8:45.**

## **14. Points from the Technical Council meeting.**

### **Early career support**

Some in BB have pushed for support of early career people. It is a focus at ASA although not particularly at the Paris meeting. There is funding for each meeting except Paris and the info is in the call for papers. However, at Paris, ASA is providing extra student support. Also each TC has been given more money than usual to help (in a small way) defray travel cost for those who need it.

### **Paris**

Reminder do stuff early for Paris. Abstracts, registration hotel. You will save money and headaches.

### **Technology Updates**

ASA is always looking to expand. One way proposed to bring in industry types was to have special sessions called something like “technology updates.” These might open the door to more commercial or less rigorous scientific talks that would connect researchers with real world issues. It is an idea to think about. Certainly in the medical ultrasound realm, ISTU and IEEE

attract many industry folks. This might be a way to bring these people to ASA and also have them present.