

# Education in Acoustics Committee

# MINUTES from the ED Com Meeting – ASA 178, San Diego

(Tuesday, Dec. 3, 2019, 5:00-6:30pm in *Hanover*)

**NOTE:** These minutes have been updated (5/5/2020) to reflect changes in the ASA scheduling of future meetings due to the COVID-19 pandemic.

Meeting was called to order at 5:00pm by ED Comm Chair, Dan Russell.

# Attendance: (35 people signed in)

Freddie Bell-Berti, Kent Gee, Vic Sparrow, Preston Wilson, John Buck, Jack Dostal, David Dowling, Scott Hawley, Matt Kamrath, Andrew Morrison, Bill Murphy, Peggy Nelson, Andrew Piacsek, Juli Simon, Randy Worland, Tyrone Porter, Dan Russell, Keeta Jones, James Sabatier, Jim DeGrandis, Thomas Moore, Takayuki Arai, Trevor Jerome, Jill Linz, Andrea Calihanna, Juyeon Chung, Tyler Flynn, Michael Rollins, Kurt Hoffman, Kimberley Riegel, Micah Shepherd, Yun Jing, Shima Abadi, Meria Burgess, Steven Waller.

# **Approval of Minutes from ASA 177 in Louisville**

Motion to accept and approve the minutes (Freddie Bell-Berti) and seconded by (??). Approved by verbal assent.

# **Announcement of Awards**

#### **Rossing Prize in Acoustics Education**

Congratulations to the **2019** recipient: **Preston Wilson**. The Rossing Prize Lecture "Learning and Teaching Acoustics Through Bubbles" was Tuesday morning 2aEDb at 11:00am in Carousel. **(45-50 attended)** 

Very few nominations have been submitted in recent years (only 3 nominations for 2019). The prize is not limited to ASA members. How/where could we advertise to increase awareness of this prize? Reponses included: a summary article (about the prize and previous winners?) in <u>Acoustics Today</u> or <u>Physics Today</u>.

Next call for nominations will be posted soon and will be due March 2020. Current Rossing Prize selection committee members are:

ED Comm Chair - Dan Russell

1 member selected by Education Committee Chair – Andrew Morrison (2018-2021)

1 member selected by ASA President – Tyrone Porter (2017-2020)

2 members selected by Special Fellowships Chair - John Buck (2018-2021) and David Dovling (2019-2022)

#### Robert W. Young Award for Undergraduate Research

Five (5) applications were received and were reviewed by Dan Russell (chair) along with Andrew Morrison and Benjamin Tucker reviewed the applications. Funding in the amount of \$2500 was available, so all received funding:

- Lucas Barnes "Experimental quantification of near-field scattering super resolution in time reversal acoustics" \$400 (Brigham Young University Brian Anderson, Advisor)
- Jorge Mateus "Using ultrasonic arrays for object detection" \$500 (Michigan State University — Sunil Chakrapani, Advisor)
- **Kathleen Ohman** "The effects of blast-induced TBI on mouse ultrasonic vocalizations" \$600 (SUNY Buffalo Michael Dent, Advisor)
- Julian Quintero "Effects of sand density and wetness on acoustic impedance" \$600 (East Carolina University Teresa Ryan, Advisor)
- Samantha Scheidler "Studying DPOAE fine structure patterns in different recording paradigms" \$400 (Michigan State University Maryam Naghibolhosseiri, Advisor)

Some discussion about raising awareness of this Award, including announcing it to SPS (Society of Physics Students) and other AIP/AAPT/ASEE/AES orgs with strong undergraduate and/or regional chapters.

# **Special ED Sessions at ASA 178 San Diego**

# **ED Organized Sessions**

**TUESDAY**:

2aEDa – Mentoring Graduate and Undergraduate Students – 7:45-10:50am – Carousel. (35-40 attended) 2pEDb – Acoustics Education Rossing Prize Lecture – 11:00am-12:00noon – Carousel (45-50 attended)

#### **WEDNESDAY:**

3aED – Hands-On Demonstrations – 8:30am-12:30pm – Carousel (30 8th-grade students, 3 teachers, 17 ASA member volunteers.)

**3eED – Listen Up and Get Involved** – 5:30-8:30pm – *Carousel* (This session was cancelled prior to the meeting – absolutely NO interest from San Diego Girl Scouts). 2<sup>nd</sup> meeting in a row to cancel. Time to revisit this? (Wed. time slot? Transportation? Other groups to target?)

#### THURSDAY:

4pEDa – Selecting a textbook for teaching an acoustics course – 1:00-2:45pm – Carousel (25 attended) 4pEDb – Take 5's – 3:00-4:00pm – Carousel. (20 attended)

# **Other Jointly Sponsored Sessions** (organized by another TC, but supported by ED) TUESDAY:

2aIDa – Guidance From the Experts: Applying for Grants and Fellowships – 1:00-2:30pm – Carousel

# **Future Meetings and Special ED Sessions**

ASA 179 - Chicago, IL (Spring 2020) - Abstracts are due 6 January and TPOM is 6 February, 2020.

ASA 179 - Chicago, IL (December 8-12, 2020) - New Call for Papers and New Abstract Date (Soon)

- Hands-On Demos (for Middle / High School students)
- Listen Up and Get Involved (?) (waiting to learn if Girls Scouts or other groups will participate)
- Rossing Prize Lecture
- Acoustics Demonstrations for Classroom Teaching Dan Russell (ED with MU, PA, SA, NS, AA)
  - Innovative and novel apparatus for demonstrating acoustics concepts in the classroom, for introductory, advanced, and graduate level courses. Classical demonstrations are welcome, but we are especially looking for demonstrations from a wide variety of topical areas, demonstrations of phenomena that can be difficult to understand or visualize, and new or innovative ways of demonstrating acoustics and vibration concepts. A panel discussion will follow for audience members to interact with demonstrations and presenters.
  - Limited funds are available to assist in shipping equipment to Chicago.
  - 7 invited presentations were scheduled for original May meeting hopefully all 7 (and perhaps 1-2 more) will present in December.
- Undergraduate Research Exposition Poster Session Dan Russell (ID)
  - Travel funds are available applications available from ASA office
- Graduate Programs in Acoustics Poster Session Keiren Smith (Student Council, ID)
- **Teaching Speech & Hearing Science to Undergraduates** Freddie Bell-Berti (SC cosponsor by ED,PP)
- Musical Acoustics Education at Undergraduate Level Andy Morrison (MU cosponsor ED)
- Larry H. Royster Memorial Session (organized by Noise joint with ED)
- New Developments in Classroom Acoustics (Architectural joint with Standards, Noise, Speech, ED

## ASA 180 - (Seattle, WA) (June 7-11, 2021)

- Hands-On Demos
- Listen Up and Get Involved ??? (depending on Seattle area Girl Scouts Interest)
- Connecting Industry and Education Jim DeGrandis and Dan Russell
  - Internships, equipment donations, educational programs, mentoring, etc.
- STEAM ideas and resources for science fair projects teaching younger kids (Kim Riegel Andrea Calilhanna Cameron Vongsawad)
- Regional chapter in Seattle area? (professional focus) --
- Pacific Science Center? (tour)

#### **Future Meetings** (costs may go up for future meetings!)

- ASA 181 Sydney, Australia (Dec. 6-10, 2021)
- ASA 182 Denver, CO (Spring 2022)
- Locations for Fall 2022 through Fall 2024 are under discussion
- Spring 2025 New Orleans, LA Joint meeting with ICA
- Fall 2025 Honolulu, HI
- Spring 2026 Philadelphia, PA semiquincentennial

# **Reports from Keeta Jones (ASA Outreach)**

#### **International Year of Sound**

- International Noise Awareness Day April 25 (subcommittee within Noise TC)
- World Hearing Day (March 3)
- Wikipedia Editing Workshop (how to edit Wikipedia pages on Acoustics) workshop at ASA 179 Chicago "Edit-athon" will take place throughout 2020.
  - ⇒ ASA 178 San Diego **3aED1 Using Wikipedia to promote acoustics knowledge for the International Year of Sound 2020.** Right before the Hands-On demo session in *Carousel*. Jess Wade biographies of underrepresented scientists.
  - Venture partnership GRANT (in collaboration with SPS funding for ASA and SPS chapters)
    - speaker series (funding for honorariums for 12 speakers)
    - funding tours of acoustics facilities (labs, concert halls)
    - Sound walks
    - ⇒ASA chapter joins with local SPS chapter to sponsor event and ask for funding
  - SPS **SOCKS** (Science Outreach Catalyst Kits) acoustics theme for 2020 (budget increased) both SPS and ASA chapter can request free of charge (200 kits free of charge)
    - ⇒ need input from ED COMM for input to what the kits could contain! . . .
    - ⇒ demo + "how to use" + video . . . Brad Conrad (SPS)

#### **Update on Booths Initiative**

- PhysCon2019 Co-sponsor Physics of Jazz Workshop at PhysCon2019
- Award Winners **ISEF** 3 of the winners (High school students!!!) attended ASA 178 San Diego and presented talks or posters!!! Details at <a href="https://acousticstoday.org/acoustical-society-of-america-participation-at-the-international-science-and-engineering-fair-inder-raj-s-makin/">https://acousticstoday.org/acoustical-society-of-america-participation-at-the-international-science-and-engineering-fair-inder-raj-s-makin/</a>.



See the writeup in the **Fall 2019** *Acoustics Today*.

- 2<sup>nd</sup> -- Joonyoung Lee & Mincheol Park .
- 3<sup>rd</sup> -- Sauhaarda Chowdhuri
- Hon. Ment. -- E'van Tongol, Neil David Cayanan, and Shaira Gozun
- USA SEF collaborating with AIP (international year of sound theme!)

#### **Update on ASA Teacher Activity Kits**

- Report on requests and status of kits.
- Company that stores and assembles kits can't do it anymore (federal regulations) (use handicapped helpers regulations changed). Kits are "out of stock" depleting current stock.
- NEED to **design Activity Kit 2.0** and find a new company to build/assemble. Also reconsider materials (plastic straws, etc.) . . . . subcommittee to explore this?
  - o Volunteers? Andy Morrison, Kim Riegel, Keeta Jones, Bill Murphy, Andrea Calilhanna, Kurt Hoffman
  - o Feedback from users of the kits (last survey 3 years ago) get survey from Keeta and post.
- Who will provide funding for these kits? ASA currently funds 200 kits.
  - o Look at what OSA does (two versions of kits one free, one for \$\$)
  - o Target age? Middle school?
  - o Dangerous Decibels teacher instruction kit (included in ASA Teacher Activity Kit)
  - o It's a Noisy Planet ASA partners with them
  - o CDC comic book on hearing health (middle school target ask a scientist)

#### **ExploreSound.org**

- Graduate Program Database Update check to see if your school's program is represented!
- Updates to ExploreSound.org to reflect International Year of Sound.
- ED Comm (asaedcom.org) webpage (Keeta has been performing some updates) feedback from ED comm members?

# **Other Subcommittee Reports**

# SMMfL (Students Meet Members for Lunch) – Report from Martin Lawless

• We had **84 students** and **67 members** submit the questionnaires. We were able to successfully match all 84 students (81 by the program, 3 manually). Broken down by TC:

AO	AB	AA	BA	EA	MU	NS	PA	PP	SP	SC	SA	UW
5	8	5	4	7	1	4	5	4	10	19	5	7

- David Blackstock has retired from chairing the SMMfL subcommittee.
  - o The new SMMfL chair is Martin Lawless (with support from other subcommittee members)
  - o Current problems for government employees cannot sign up using the FORM. Could we send out an email to all attendees after registration opens with a link, or follow up to sign up?

#### **TPOM**

Need a new volunteer to help Dan Russell as backup for Chicago and as primary for Cancun Seattle.

• TPOM – Matt Kamrath

#### **Student Council**

Report from ED Student Council Liaison, Michael Rollins

Proposal -- ASA Student Council Mentor Award to be renamed after David Blackstock.

## **Current Business** (items to discuss at ASA 178 San Diego)

# **Proposal for AAPT Waves Workshop for Middle School Teachers**

Gordon Ramsey is coordinating a team from AAPT and ASA to organize, develop, and run a 2-day workshop on Waves (Optics and Acoustics) for middle school teachers. Proposal Fall 2019, first offering of workshop in Summer 2020. What is the status of this? Probably going to turn into the Year of Sound Workshop? New AAPT K-12 coordinator. \$\$\$ has been allocated from venture capital.

#### **Special Issue on JASA Education in Acoustics**

Preston Wilson and Dan Russell will co-coordinate and co-guest edit this Special Issue. Call for Papers will go
out late sometime early mid 2020.

**POMA** – Dan Russell is associate editor for Education.

• Encourage presenters to write up papers for POMA

## **New Business** (items for current discussion)

### Information from the Technical Council meeting Monday Dec. 2

- ASA Standards is the ASA membership benefit of 5 FREE standards going away? This year (2019) members still have the opportunity to obtain 5 free standards until the end of the year (Dec. 31). Starting 2020, all standards will be available only for purchase. Considerations for offering bundles (similar topics) for reduced cost. Reason for dropping the free standards is financial cost (negative balance) and sense of "less value" when standard (which has costs to develop) are offered free generation of revenue will allow for marketing and better dissemination.
- Photography Policies Current practice is "no photography allowed without permission" (slide at beginning of every session) => BUT this is routinely ignored. What should the policy be moving forward? Should we just How would a policy of "No photos" be implemented? Who policies this? Who calls out and reprimands someone who is filming or taking photos? Who is responsible for saying "no photos?" the author? The session chair? POLICY needs to change Policing is a separate issue from the policy.
- ED consensus seemed to be that the default policy should be NO photos, with authors having the right to allow photos of their talk.
- **ASA-EL** to become separate open access journal, end of 2020. => costs will increase from \$500 per article to \$900 per article. Authors will be allowed +1 extra page + 1 extra figure, CCPI license for authors. Most open access journals require \$2100 per paper?
- JASA Calendar!!! calendar of JASA covers is available several places around the hotel.
- Task Force D Member Engagement Outside of Meetings => how to engage members (especially those who cannot attend meetings) between our two biennial meetings???
  - Andy Morrison has set up tinyurl.com/getAER and tinyurl.com/shareAER for places for ED members to
    place useful XXX to

# Old Business (items raised at previous meetings but not resolved)

#### **ED Com Website (asaedcom.org)**

- Who is the target audience for this website?
- How is it being used (by members?) by others?)
- What could we do better with this website to make it more useful?
- Who should be in charge of updating/revising our webpages?

At ASA 176 Victoria, it was suggested that we create a subcommittee to explore some of the questions raised

#### **ASA Auditory Demonstrations CD**

- Why is this not available on iTunes? Spotify? Googleplay?
  - o Propose through Books Committee?

## **Undergraduate Research Symposium Poster Session and Robert Young Award?**

- How / Where to advertise the Robert Young Award to attract more applications?
- What is the best timeline for the Robert Young Aware?
  - Apply in Summer/Fall present in Spring?
  - Do research during year or over summer?
  - When to present at ASA? (next Undergraduate Research Symposium is Chicago 2020)
  - Is a **special poster session** the best way for undergraduate students to share their research?
  - Travel Awards for Undergraduate Research Symposium

#### **Special Vendor Session for Students**

 At meetings with Vendor Sponsors – have a time/session for students to meet vendor reps to talk about companies, jobs, careers, etc.

# Future Business (items for Future discussion)

#### **New Item**

- Physical Acoustics Summer School 2020 held at Old Miss. February applications! Look for news!!
- Jim Sabatier Silver Medal in Physical Acoustics (former ED chair).

# **Wrap Up and Adjourn**

Motion to Adjourn – Freddi Seconded by – David Adjourn to Social!