

Education in Acoustics Committee

AGENDA – ED Com Meeting – ASA #180 "Acoustics in Focus"

(Tuesday, June 1, 2020 – 4:30-6:00pm EST)

• This will be a virtual online meeting via Zoom: https://psu.zoom.us/meeting/register/tJUkc-ihrjgpGNKg1J9boGmUHxbO5huibED8

Approval of Minutes from December 2020 ASA 179, Acoustics Virtually Everywhere meeting Motion to approve minutes as posted – Seconded –

Reflection on the passing of David Blackstock

David T. Blackstock passed away at his home on April 30, 2021. David was a longstanding active member of the Education in Acoustics committee, serving as its third chair from 1968-1972. His textbook, *Fundamentals of Physical Acoustics* is used by many of us who teach graduate level courses in acoustics. David was awarded the Rossing Prize for Acoustics Education in 2007. He was the driving force behind and a fierce champion of SMMfL (students meet members for lunch). In 2019 the ASA student council renamed their mentoring award after him: the Student Council David T. Blackstock Mentor Award (David was the first recipient of the mentor award in 2004), in order to honor his strong support of students and young faculty within ASA. David will be greatly missed. A touching obituary may be found at: https://www.dignitymemorial.com/obituaries/austin-tx/david-blackstock-10177774

Report from Subcommittees

SMMfL (Students Meet Members for Lunch)

Update from SMMfL chair, Martin Lawless . . . Looks like **very low** numbers for Acoustics-in-Focus. 17 students (from every TC except the new Computational Acoustics) and 14 members. Committee is working on ideas for innovating the SMMfL program (website, database, etc.).

Special ED Sessions for Acoustics in Focus (June 8-10, 2021)

- Tuesday, June 8
 - 1pED 12:55pm-3:00pm EDT Reflections on Teaching Acoustics During a Pandemic
 - 1pED1: Musical acoustics video demonstrations for online classes William Hartmann (Michigan State University)
 - 1pED2: Supporting Hyflex Acoustics Laboratory Sessions Scott Hawley (Belmont University)
 - 1pED3: Teaching Underwater acoustics and sonar during the COVID pandemic Murray Korman and Leah Burge (U.S. Navy Academy)

 - 1pED5: Aspects of teaching online during COVID-19 that I want to retain when returning to a "normal" classroom –
 Daniel Russsell (Pennsylvania State University)
 - 1pED6: Sharing physics through sound: Undergraduate outreach Holly Fortner and Brad Contrad (Society of Physics Students)
- Wednesday, June 9
 - → 2pCA 12:55pm-4:10pm EDT Tutorials on Computation Techniques and Best Practices
- Thursday, June 10
 - 3aSC 9:30am-12:20pm EDT Teaching Speech and Hearing Science to Undergraduates I
 - 3pSCa 12:55pm-2:00pm EDT Teaching Speech and Hearing Science to Undergraduates II
 - 3pSCb 2:15pm-3:15pm EDT Teaching Speech and Hearing Science to Undergraduates III

Update on Education in Acoustics Awards

2021 Rossing Prize for Education in Acoustics

The 2021 Rossing Prize Selection Committee is:

Dan Russell (ED Com chair 2018-2024)
Andy Morrison (selected by previous ED Com chair – 2018-2021)
John Buck (selected by Chair of Prizes & Special Fellowships Chair – 2018-2021)
David Dowling (selected by Chair of Prizes & Special Fellowships Chair – 2019-2022)
Barbara Shin-Cunningham (selected by ASA president – 2021-2024)

 \Rightarrow No new nominations for 2021. \Rightarrow No prize to be awarded for 2021.

⇒ We need members of ED COM to submit nominations for the Rossing Prize.

Plans to increase the awareness of the Rossing Prize both within ASA and other acoustics-related societies and organizations:

- Networking with our counterpart acoustical societies in North America, Europe, South America, and Asia and Australia, as well as some other academic professional societies (AAPT, ASEE) in order to try to solicit a larger number of qualified nominations next year.
- Sending an announcement about the award to all members of ED COM in the late Summer and Fall, and a
 final reminder in January to remind ASA educators to nominate their peers. We have heard from a few
 people that the current prizes "call for nominations" from ASA buries the Rossing Prize at the end of a long
 email (or at the bottom of the Prizes website) so that it is not prominently seen.
- Expanding the webpage (https://asaedcom.org/awards/) on the ED COM website to more prominently showcase the Rossing Prize, with a direct link to the nomination form.
- Working with ASA social media to broadcast the "call for nominations" through social media channels in the December-January.

Update on JASA Special Issue on Education in Acoustics

Call for Papers: https://asa.scitation.org/jas/info/specialissues/cfp_020421

Preston Wilson and Dan Russell are co-guest editors.

Deadline for Manuscript submissions: October 15, 2021.

Four (4) manuscripts have been submitted so far (end of May 2021) . . . several inquiries, intent to submit . . .

We need members of the Education in Acoustics Committee to:

- Write and submit papers for this special session (authors can have multiple papers)
- Serve as reviewer for submitted papers

ED Special Sessions for Future Meetings

We will plan on holding our "normal" outreach events at each in-person meeting, unless local conditions or interest does suggest otherwise.

- Hands-On Demos
- Listen Up and Get Involved (depending on Seattle area Girl Scouts Interest)

As of May 2021, it is my understanding that ASA #181 will be in-person in Seattle (but be prepared for shift to all-virtual?)

ASA #181 – Seattle, WA – (November 29 – December 3, 2021)

- Highlights in Acoustics Education (preview of the JASA Special Issue) Dan Russell and Preston Wilson
 - (Invited ONLY) speakers selected from authors who have submitted manuscripts for the JASA special issue on Education in Acoustics.
- Psychoacoustics and Acoustics Education —Martin Lawless and ?? (coordinate with P&P?)
 - ▶ How we perceive sound . . . education about sound perception and human hearing . . . human auditory system.
- Tour (or social event) at the Pacific Science Center? Keeta Jones will follow up

ASA #182 – Denver, CO – (May 23-27, 2022)

- Connecting Industry and Education Jim DeGrandis and Dan Russell
 - Case studies and examples of successful partnerships between industry and educational institutions. Internships, equipment donations, educational programs, mentoring, etc.
- STEAM ideas and resources for science fair projects teaching younger kids Kim Riegel Andrea Calilhanna, Cameron Vongsawad
 - Acoustics related ideas and resources for science fair projects or home-schooling activities.

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ASA #183 – Nashville, TN – (December 5-9, 2022)
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ASA #184 – Chicago, IL – (May 8-12, 2023)

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ASA #185 -- Sydney, Australia – (Fall 2023)

This is a JOINT meeting with the Australian Acoustical Society and WESPAC. The Technical and Executive councils have asked that these sessions involve a co-chair/co-organizer from both the ASA and also the Australian Acoustical society and/or one of the Asian acoustical societies.

- Connections between Music and Math Andrea Calilhanna
- Online Resources for Teaching Acoustics (with a music flavor?) Andy Morrison and Joe Wolfe?
- Approaches to Acoustics Education in the Asia Pacific Region Marion Burgess and ???
- **Distance Learning for Acoustics Professionals Across International Boundaries** Marion Burgess and Dan Russell and ???

Some Recent ED Special Sessions at Recent Past Meetings

- ASA167 Providence (Sp 2014) => Tools for Teaching Advanced Acoustics
- ASA169 Pittsburgh (Sp 2016) => Preparing Graduate Students for Careers in Acoustics
- ASA169 Pittsburgh (Sp 2016) => Expanding Acoustics Outreach with Social Media
- ASA169 Pittsburgh (Sp 2016) => Demonstrations of Structural Acoustics and Vibration
- ASA173 Providence (Sp 2017) => Communicating Scientific Research to Non-Scientists
- ASA173 Providence (Sp 2017) => Teaching Tips for New (or Not So New) Acoustics Faculty Members
- ASA174 New Orleans (Fa 2018) => Synthetic Aperture Sonar for Youngsters
- ASA175 Minneapolis (Sp 2018) => Developing and/or Using Interactive Simulations for Teaching Acoustics
- ASA 176 Victoria (Fa 2018) => Measuring Educational Outcomes
- ASA 176 Victoria (Fa 2018) => Mentoring Across Differences
- ASA 177 Louisville (Sp 2019) => Promoting Student Publishing Success
- ASA 178 San Diego (Fa 2019) => Mentoring Graduate and Undergraduate Students
- ASA 178 San Diego (Fall 2019) => Selecting a Textbook for Teaching an Acoustics Course
- ASA 179 AVE Virtual (Fall 2020) => Acoustics Demonstrations for Classroom Teaching
- ASA 180 AiF Virtual (Sp 2021) => Reflections on Teaching Acoustics During a Pandemic

BREAK OUT ROOM DISCUSSIONS:

- What session topics would YOU be most interested in attending? (listen to presentations)
- What session topics would **you** most likely want to **contribute** to? (present a paper)
- What session topics would be most helpful to YOUR STUDENTS?

Reports from ASA Outreach and Education (Keeta Jones)

CIRDI – Committee to Improve Racial Diversity and Inclusivity

SURIEA - Summer Undergraduate Research & Internship Experience in Acoustics

- 17 undergraduate students from underrepresented minorities
- Two-Week Acoustics Summer School (Kim Riegel, Eric Reuter, Adrian KC Lee)
- 10-week research / industry internships with mentors/sponsors

ASA Outreach Activities

International Year of Sound (IYS): activities extended through 2021

- Wikipedia edit-a-thon https://meta.wikimedia.org/wiki/Wiki4YearOfSound2020
- Past/Upcoming virtual events https://exploresound.org/virtual-events/
- Acoustics Today IYS issue https://acousticstoday.org/issues/2020AT/SpecialIssue/#p=1
- Physics Today IYS issue https://physicstoday.scitation.org/toc/pto/73/12

Update on Booths Initiative - VIRTUAL exhibit booths at other society meetings:

- AAPT
- SACNAS
- NSBP

Update on ASA Teacher Activity Kits

- Status on version 2.0 of the Activity Kits . . .?
- Potential Kit Management: BrightKey or Educational Innovations
- Subcommittee:

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Other Outreach Activities

- <u>Invited Speaker Series (ASA and SPS)</u> has pivoted to virtual talks. Volunteer speakers are needed!
 - → Dan Russell gave a seminar for SPS "Acoustics of Ping Pong" (Sept. 23)
- Society Civic Science Initiative https://www.societycivicscience.org/

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- SPS Science Outreach Catalyst Kits (SOCKs) focus on Sound –
- Acoustics Education Workshop was scheduled for summer 2020 AAPT meeting (which moved to an online virtual meeting). Plan to reschedule to next summer 2021 AAPT meeting?
- for minority students applying to graduate programs in acoustics?

New Business . . . things to think about for the Future of ED COMM

Mini Virtual ED Com conferences (aligned with Task Force D)

- Every 3 months? . . . live session with a couple of speakers
- Possible topics: diversity in acoustics, REUs, Science Engagement, Demonstrations
- Small fee for participants?

BREAK OUT ROOM DISCUSSIONS:

Ways we could use the ASA ED webpage more effectively

- What could we do as a committee to have a more effective, collaborative presence online?
- Repository for Education/Teaching/Demonstration materials
 - K-12 level?
 - Undergraduate level?
 - Graduate level?
 - Industry?

Call to Adjourn: