# Committee on Education in Acoustics (EdCom) [Meeting Agenda]

5:30 pm Wednesday, 30 November, 2016 Lehua, Hilton Hawaiian Village Waikiki Beach Resort, Honolulu, Hawaii

#### I. Welcome + Introductions

- A. Live Streaming!
- B. Sign-In Sheet
- C. First-Time Attendees and New (and Potential) Member Introductions
- D. Review/Approve previous meeting minutes
- II. Acknowledgements + Recognition
  - A. Rossing Prize in Acoustics Education
    - 1. Recognizes an individual who has made significant contributions toward furthering acoustics education through distinguished teaching, creation of educational materials, textbook writing and other activities
    - 2. This year's recipient was Brad H. Story, Univ. of Arizona
    - 3. 4pEDb Acoustics Education Prize Lecture: "The role of artificial speech in understanding the acoustic characteristics of spoken communication" SOUTH PACIFIC 4, 4:05 P.M. TO 5:00 P.M.
    - 4. Selection Committee: David T. Bradley, Robert Fox, Lauren Ronsse, Karim S. Sabra, and Scott D. Sommerfeldt
    - 5. Next award cycle will begin in ~Spring 2017
  - B. Robert W. Young Award
    - 1. Award for undergraduate student research in acoustics
    - 2. Five submissions this year, four awards
    - 3. Recipients:
      - a. Lucas Shearer, University of Hartford, "Using Acoustic Waves as a Therapeutic tool for Ostogenic Differentiation"
      - b. Noah Sonne, East Carolina University, "A Study of Complex System Dynamics: Metronome Synchronization"
      - c. Danielle Lynd, The Ohio State University, "The Design and Manufacturing of Origami-Inspired Acoustic Transducer Arrays"
      - d. Austin M. Wanek, University of Cincinnati, "Investigation of the Relationship Between Hemolysis and Acoustic Droplet Vaporization"
    - 4. \$500 awarded to each recipient
    - 5. Selection Committee: David T. Bradley and Andrew Morrison

- 6. Next award cycle will start in ~September 2017
- III. Old Business
  - A. Education and Outreach Coordinator (EOC) David T. Bradley
    - 1. Keeta Jones
      - a. B.A. in German and Linguistics at University of Toledo
      - b. M.A. in Linguistics at Ohio State University
      - c. Science Demonstrator at the Center of Science and Industry (COSI)
      - d. Program Assistant for an NSF Research Experience for Undergraduates (REU) at COSI
      - e. Instructor in linguistics at Ohio State
    - 2. Duties
      - a. Hands-On/Listen-Up sessions
      - b. activity kits
      - c. exploresound.org website
      - d. EdCom booths initiative
      - e. graduate program database
      - f. connecting with other groups (AIP, AAPT, etc.)
    - 3. Thank you to the selection committee: Susan Fox, Freddie Bell-Berti, David T. Bradley, Traci Neilsen, and Vic Sparrow
  - B. EdCom Website <asaedcom.org> David T. Bradley
    - 1. We need YOU (e-mail education@acousticalsociety.org):
      - a. Content review and suggestions
      - b. High resolution photos
      - c. URLs for professional websites
    - 2. Funding Request: \$500
      - a. Website maintenance (Morrison to fill out form)
  - C. Exploring Sound Website <exploresound.org> Keeta Jones
    - 1. [see minutes for full report]
    - 2. Site has been updated based on previous notes
    - 3. We need YOU (e-mail kjones@acousticalsociety.org):

- a. review the site and send feedback
- D. Booths Initiative Keeta Jones
  - 1. [see minutes for full report]
  - 2. 2016 Quadrennial Physics Congress (PhysCon) Booth (San Francisco, CA, 3-5 November 2016)
  - 3. Keeta Jones, David T. Bradley, and Sam Gilbert (Vassar student) hosted a booth
  - 4. High attendance to booth, nearly 400 prize giveaways
  - 5. Next booth will be at the 2017 SACNAS (Society for Advancement of Chicanos/Hispanics and Native Americans in Science) Conference (Salt Lake City, Utah, 19-21 October 2017)
- E. Scientific Presentation Workshop Michelle Vigeant
  - 1. Effective Scientific Presentations Workshop Michael Alley
    - a. < http://www.writing.engr.psu.edu/speaking.html>
  - 2. Funding Request: \$3000
    - a. Honorarium, travel, lodging, books (Vigeant to fill out form)

#### IV. Subcommittee Updates

- A. Acoustics Education (Rossing) Prize Selection Subcommittee
  - 1. No report for Fall 2016, next selection in ~Spring 2017
- B. Teacher Activity Kits Subcommittee Update Andrew Morrison
  - 1. [see minutes for full report]
  - 2. Subcommittee Members: Andrew Morrison (chair), Keeta Jones, Michelle Vigeant, David T. Bradley, Andy Piacsek, Whitney Coyle, and Daniel Ludwigsen
  - 3. 16 kits sent out in the past six months (475 kits total)
  - 4. Primary goal for next 6 months is to better advertise kit, develop/change kit based on user feedback, and fix the Explore Sound site (work will be done with the new EOC)
  - 5. New collaboration with AAPT Keeta Jones
    - a. two-day "Waves" workshop with Rebecca Vieyra (AAPT k-12 Program Manager), Gordon P. Ramsey and Andrew Morrison.
      - i. interactive pedagogies
      - ii. outreach to students from ethnic groups traditionally underrepresented and/or underserved
      - iii. grant connection for broader impacts
  - 6. Funding Request: \$20,000

- a. Activity kit materials (Morrison to fill out form)
- C. SMMfL (Students Meet Members for Lunch) Subcommittee Update David T. Blackstock
  - 1. [see minutes for full report]
  - 2. Subcommittee Members: David T. Blackstock (chair), Ela Warnecke, Caleb Sieck, and Martin Lawless
  - 3. Statistics
    - a. Total Number of Lunch Matches: 106
    - b. AA(8), AB(8), AO(10), BA(8), EA(21), MU(3), NS(6), PA(14), PP(26), SA(14), SC(55), SP(23), UW(16)
  - 4. We need MORE members to volunteer to host lunches!
- D. Undergraduate Research Exposition Subcommittee Update
  - 1. No report for Fall 2016 next Expo will be in New Orleans
  - 2. Subcommittee Members: Preston Wilson (chair), Murray Korman, ADDITIONAL MEMBER NEEDED
- E. Graduate Program Database Subcommittee Keeta Jones
  - 1. We need student members to work on this project and provide information about their own graduate programs
  - 2. Subcommittee Members: Matthew Kamrath (chair), John Buck, Keeta Jones
- F. Resume Help Desk Subcommittee Update David Dowling
  - 1. [see minutes for full report]
  - 2. Salt Lake City Meeting: 12 resumes were reviewed (same as Jacksonville).
  - 3. Subcommittee Members: David Dowling (chair), Ela Warnecke, Michael Bailey
    - a. Subcommittee will focus on recruiting resume reviewers and advertising the service to students and early-career members
  - 4. SLC Help Desk Volunteers: Carr Everback, Tim Stanton, Jason Gaudette, Tom Matula Robert Port, Tom Weber, (Women in Acoustics, we need you!)
  - 5. Funding Request: \$350
    - a. Lunch for Help Desk volunteers at Boston (Dowling to fill out form)
- V. New Business
  - A. Task Force 1: Awareness of Acoustics MOOC Initiative Andy Piacsek
    - 1. [see minutes for full report]

### VI. Meetings

- A. Current Meeting (Honolulu, HI)
  - 1. Thank you to the TPOs: Andy Piacsek + Eoin King!
  - 2. Thank you to the Session Chairs!
  - 3. Special Sessions
    - a. 1aED Attractive Educational Methods and Tools in Acoustics I
      - i. Monday, SEA PEARL, 10:30 A.M. TO 12:05 P.M.
      - ii. Co-Chairs: Tracianne Neilsen and Kazuhiko Kawahara
    - b. 1pED Attractive Educational Methods and Tools in Acoustics II
      - i. Monday, CORAL 3, 1:00 P.M. TO 2:45 P.M.
      - ii. Co-Chairs: Tracianne Neilsen and Kazuhiko Kawahara
    - c. 3pEDa Demonstrations and Tools in Acoustics Education
      - i. Wednesday, HIBISCUS, 1:30 P.M. TO 3:30 P.M
      - ii. Co-Chairs: Tracianne Neilsen and Akira Nishimura
    - d. 3pEDb Education in Acoustics for Kids (K-12 students)
      - i. Wednesday, KAHILI, 4:00 P.M. TO 5:20 P.M.
      - ii. Co-Chairs: Andrew Morrison and Sakae Yokoyama
    - e. 4pEDa Using Computers for Acoustics Education
      - i. Thursday, SOUTH PACIFIC 4, 1:00 P.M. TO 3:40 P.M.
      - ii. Co-Chairs: Victor Sparrow and Hiroshi Suda
    - f. 4pEDb Acoustics Education Prize Lecture
      - i. Thursday, SOUTH PACIFIC 4, 4:05 P.M. TO 5:00 P.M.
      - ii. Chair: Robin Samlan
  - 4. Comments on the current meeting?
- B. Boston, Massachusetts 25-29 June 2017 (joint with EAA)
  - 1. TPOs: Eoin King + Dan Russell
  - 2. Special Sessions
    - a. Listen Up and Get Involved
      - i. Chair(s): Keeta Jones + Tracianne Neilsen

- b. Hands-On Acoustics Demonstrations for Middle-School Students
  - i. Chair(s): Keeta Jones + Tracianne Neilsen
- c. Take 5s
  - i. Chair(s): Larry Feth + Jack Dostal
- d. Teaching Tips for the New (or not so New) Acoustics Faculty Member
  - i. Tips for new faculty members who will be teaching courses in acoustics or vibration at undergraduate (introductory or advanced) or graduate levels for the first time. Suggested topics include: course organization, choosing a textbook, pedagogical methods, and strategies for homework and exams.
  - ii. Chair(s): Andy A. Piacsek and Daniel A. Russell
- e. Collaborative and Interdisciplinary Acoustics Courses
  - i. Acoustics is an inherently interdisciplinary field. This session will present undergraduateand graduate-level courses that exemplify this interdisciplinarity. Potential topics could include cross-institutional courses, cross-departmental courses, team-taught courses, and STEAM (Science, Technology, Engineering, ARTS, and Mathematics) courses.
  - ii. Chair(s): David T. Bradley
- f. ID: Graduate Program Poster Session (co-sponsored with Student Council)
  - i. A wide range of Graduate Programs in Acoustics will be presented in poster format including what each university has to offer a prospective student.
  - ii. Chair(s): Y. Sanjay
- g. Communicating Scientific Research to Non-Scientists
  - i. Strategies for communicating acoustics research, as well as raising awareness and interest in acoustics, to the public and policy makers
  - ii. Chair(s): Andy Piacsek + Kerri Seger
- C. New Orleans, LA, 4-8 December 2017 (must finalize sessions week)
  - 1. TPOs: Eoin King + Dan Russell
  - 2. Special Sessions
    - a. Listen Up and Get Involved
      - i. Chair(s): Keeta Jones
    - b. Hands-On Acoustics Demonstrations for Middle-School Students
      - i. Chair(s): Keeta Jones
    - c. Acoustics Education Prize Lecture
      - i. Chair: TBD

- d. Undergraduate Research Exposition
  - i. Chair(s): Preston Wilson + Murray Korman
- e. Synthetic Aperture Sonar for Youngsters Murray Korman
- f. Presentations of Synthetic Aperture Sonar or air acoustic imaging in a way that would be useful to motivate young people and get them involved. Could include questions about how to effectively teach acoustic imaging to young people could be addressed, demos or visualizations of certain interesting aspects of acoustic imaging could be presented.
  - i. Chair(s): Murray Korman
- g. Other ???
  - i. Chair(s): ???
- D. 175th Meeting, Minneapolis, Minnesota, 7-11 May 2018
  - 1. TPOs: Dan Russell + ??
  - 2. Special Sessions
    - a. Listen Up and Get Involved
      - i. Chair(s): Keeta Jones
    - b. Hands-On Acoustics Demonstrations for Middle-School Students
      - i. Chair(s): Keeta Jones
    - c. Other ???
      - i. Chair(s): ???
- E. 176th Meeting, Victoria, Canada, 5-9 November 2018
  - 1. TPOs: Dan Russell + ??
- F. 177th Meeting, Louisville, Kentucky, 13-17 May 2019
- G. 178th Meeting, TBD
- H. 179th Meeting, Chicago, Illinois, Spring 2020
- I. 180th Meeting, Cancun, Mexico, Fall 2020
- VII. Other New Business
  - A. ?
- VIII. Summary + Talking Points
  - A. VOLUNTEER OPPORTUNITIES:

- 1. Everyone (!) review and contribute to new <asaedcom.org> site; email <education@acousticalsociety.org>
- 2. Everyone (!) review and contribute to new <exploresound.org> site; email <kjones@acousticalsociety.org>
- 3. New Undergraduate Research Exposition Subcommittee member (~1)
- 4. Student volunteers to help with Graduate Program Database
- 5. TPO for 2 years (Boston, New Orleans, Minneapolis, and Victoria)
- B. New Education and Outreach Coordinator: Keeta Jones!
- C. See Meeting Program, Call for Papers, and EdCom Website <asaedcom.org> for regularly occurring EdCom initiatives
  - 1. Listen Up and Get Involved
  - 2. Hands-On Acoustics Demonstrations for Middle-School Students
  - 3. Undergraduate Research Exposition
  - 4. Rossing Prize in Acoustics Education
  - 5. Acoustics Graduate Program Database
  - 6. Resume Help Desk
- D. SMMfL (Students Meet Members for Lunch)
  - 1. We need a larger, sustained pool of volunteers to host student lunches. Get the word out to your TC members!
- E. Stronger connection to all TCs
  - 1. Thank you to the TC reps for EdCom! We are actively seeking new EdCom members from all TCs. Please pass the word!
- IX. Adjourn