1. **Call to Order.** Renata Ramos, BED Division Chair, called the meeting to order at 3:32 PST. There were 41 members in attendance. (Individual names were not recorded due to the online format of the meeting for the virtual conference.) Renata announced that the PIC chair will be joining during the meeting.

2. **PIC I Division Activity Report:** PIC I Chair Christi Luks reported from the board of directors meeting on Monday that award nominations are down across the society and within divisions due to lack of nominations. Staff was informed that vaccines will be required in future upcoming meetings. Upcoming collaboration will be announced for P-12 and DEI STEM research will be coming out with the PIC meeting minutes. There was a committee on scholarly publications were formed, divisions can choose to participate to help maintain scope, quality, and standards of journals. Two ASEE administrative cases will be reported on self-plagiarism and abstract review best practices. For abstract review practices, there will be a new link in the Monolith system that will ask you to agree that you actually read the paper and use respectful language, and judge papers based on standards of the meeting. Distinguished lecture proposals had an outdated rubric asking someone to be an expert in an area that they were going to talk about, however, this year there were a lot of proposals for social justice, which were not appropriate speakers, so now they will ask if speaker has appropriate expertise to speak at the distinguished session. Conference attendee size is similar as last year, but lower due to zoom fatigue. Presentations will be recorded and sent at “view only” for the next year. Next year the conference will be in Minneapolis in person with a vaccine mandate. There will be a new system for program chairs and paper process, which will cause the process to be compressed this next year. The call for papers should be sent out via email since there will be a shorter time to submit abstracts and draft papers, going back to the traditional process.

PIC I Chair Christi Luks reported that our division dropped 2.7% in individual memberships from last year, and down 33% from our peak. Christi expressed concern as it is a primary source of revenue. ASEE has got into grants and management of fellowships and PPP loans have helped stay on budget with where we are with an in person meeting. As of BED division numbers, we are only “down a tweak and are considered one of our healthy divisions”. Best paper “Development and Quantitative Methodologies for Analyzing Resumes and their Use in Pathway Alignment” from our division was not chosen for best paper from PIC I. Best paper selection process was inconsistent across PICs. PIC chairs will be writing models of more boiler plate bylaws to avoid having to go through awards committee to have language to standardize best paper selection process.
3. **Activity Report:** ASEE Hub and website are up to date, please contact Christine for any postings or feedback on how to improve connection with the Hub and our Website.

4. **Conference Statistics.** Attendees this year was 3,110, total papers was 1,713, unique authors was 1,374, which are all very slightly lower than last year and likely due to zoom fatigue. Compared to PIC 1, we do not have a concerning drop from paper and membership trends. There has been a constant drop in BED membership trends. This is consistent since 2008, and last 5 years we dropped from 480 to 451, so the drop has been fairly steady and not too significant (has slowed down) in the last few years.

5. **PIC I Engagement.** 31 papers published in our division with 451 members who published this year, 7% of our members are publishing, so we should start thinking about engaging our members through publishing and plans for next year. We rank 3rd in ratio of papers to members compared to other PIC I divisions.

6. **Minutes.** from 2020 were shared as a google doc by Christine King, notes originally taken by Dianne Hendricks. The minutes were set/motioned/2nd/approved. See: https://sites.asee.org/bed/bylaws-and-minutes/


8. **Commission on Diversity, Equity, and Inclusion Report.** Rachel Childers provided a report from the Commission on Diversity, Equity, and Inclusion (formerly called the Committee on Diversity, Equity, and Inclusion). She shared the Commission on DEI website and noted that the commission is holding regular workshops during summer 2020. She also introduced the Constituent DEI Award, which can be awarded to a division or other ASEE group (e.g. chapter, committee, etc.). Nominations (including self-nominations) are accepted and the submission timeline will likely be November to January. For more information on other DEI programs, see ASEE Diversity Initiatives website: https://diversity.asee.org/

9. **Treasurer Report.** Alex Ortiz-Rosario discussed revenue and expenses for the past fiscal year (FY20) as well as in-progress information on revenue and expenses for 2018 and 2019, which was spent on advertisement at Council of Chairs. Last year the balance was steady. Richard Goldberg noted that the ASEE guidelines are to have a balance of no
more than 2x annual expenses, which means we can use funds this year to improve awareness through workshops or other swag.

10. **BED Awards.** Vice-chair for Honors and Awards Jennifer Choi recognized the 2021 BED award winners:
   a. **Pilkington Award:** Dr. William Guilford, University of Virginia
   b. **Teaching Award:** Dr. Yanfen Li, University of Massachusetts Lowell
   c. **Best Paper Award:** Tristan McCarty and Sarah Corinne Rowlinson Furtney, “Development Of Quantitative Methodologies For Analyzing Biomedical Engineering Resumes and Their Use In Career Pathway Alignment”, University of Florida
   d. **WIP Award:** Jen Choi, University of California Davis
   e. **Student Travel Awards:**
      Amy Adkins, Northwestern University
      Isabel Miller, University of Illinois Urbana-Champaign
   Faculty Travel Awards:
      Mark Brinton, Elizabethtown College
      Rupak Dua, Hampton University
      Ashley Earle, York College of PA

Will hear about new award that will be coming out in upcoming year.

6. **Program Report.** Aileen Huang-Saad, 2021 Program Chair, reported we had 48 submitted abstracts, 64% of submitted abstracts were presented this week, 10 platform presentations (4 sessions), and 21 “Work in Progress” posters/postcards. We had 2 WIP sessions, 2 full paper sessions, and 3 special sessions this year. We still did not have the lowest presentation total compared to 2015 despite COVID. Historical data showed that we had similar values for platforms and WIPs compared to prior years. New initiatives include the virtual hallway by Alexis and LeAnn performing a virtual game night on Gather Town for our social.

7. **Ongoing and New Initiatives.** Aileen mentioned new initiatives include Path to Publication, Call for Panel Presentations, Networking Session, and the Virtual Social Format. Ongoing initiatives include Review to Publish Requirement, Guidelines for Authors to Respond to Reviewer Comments, and additional panel tracks not realized Question the Method and Engineering Shark Tank. For next year, we will explore monthly/bi-monthly BED newsletter, similar to ERM newsletter, that includes general announcement, position announcements, and engineering education research resources. Other content such as a Pilkington Award winner write a column, a paragraph on role of IRB in educational research. Lastly, Aileen thanked executive committee for planning the conference

8. **Program Plans and Discussion.** Program Chair-Elect Tanya Nocera noted that the 2022 conference is planned to take place in Minneapolis, MN on June 26-29. She mentioned
that we should start thinking about how to bring the BME education community together more broadly (e.g. ASEE BED, CoC, BMES, BEEC), and how do we keep momentum to continue engaging? One way to do this is to publish in Biomedical Engineering Education (published by Springer) in between conferences. Other engagement ideas that were mentioned were how to submit papers to ASEE BED for newbies (webinar), get to know BED for department chairs (webinar), onboarding activities for BME graduate students, BED-led workshop, booth, or event at BMES?, encourage member involvement in BME Educators Community (BEEC), and to email her for other ideas.

9. **Other Future Conference Initiatives.** Full paper track, postcard session, poster session, will continue again next year. Will also announce a panel track of 4-6 authors to collaborate on a common panel theme where each will submit full papers within the theme. If anyone is local to Minneapolis, please reach out to plan for events during the discussion (such as engagement with Medtronic).

10. **New Business.** Renata Ramos announced that bylaws were updated in 2021. This included changes to officer terms and PIC, with the goal to create meaningful opportunities for BED members to engage in our division, and to ensure that positions that require significant training up front have appropriate term lengths. New award that will be announced next year is the BED Lifetime Faculty Mentor Award, which will be given biennially.

11. **Elections.** Mike Rust, Past-Chair and Chair of the Nominating Committee, recognized the following advancing and continuing positions:
   a. **Division Past-Chair and Chair of the Nominating Committee:** Renata Ramos (Rice University)
   b. **Division Chair:** Aileen Huang-Saad, Northeastern University
   c. **Program Chair:** Tanya Nocera, The Ohio State University
   d. **Members-at-Large:** Rachel Childers, The Ohio State University; Casey Ankeny, Northwestern University

Mike led online elections. Election results for new officers were as follows:
   a. **Program Chair-Elect:** Sarah Rooney
   b. **Members-at-Large:** Nicole Ramo
   c. **Awards Chair:** Jen Choi
   d. **Treasurer:** Alexis Ortiz-Rosario
   e. **Events Chair:** Ruth Ochia
   f. **Secretary/Webmaster:** Christine King

12. **Announcements:** Ann Saterbak is seeking faculty for partnerships with African engineering schools through NEST360, information will be provided via the workshop flyer posted on ASEE Hub. Michelle Grimm announced a postdoctoral associate position
in engineering education at Michigan State. Renata mentioned to email Christine King for posting any opportunities. Renata mentioned to email her if interested in the ASEE Pre-K-12 Engineering Education division, to reach out to her.

13. The meeting was adjourned at 4:58pm PST.

Minutes submitted by Christine King on date: _____ (to occur at BED business meeting in the following year’s conference)