ASEE 2018

ERM Business Meeting Agenda & Minutes

Salt Lake City Convention Center – Salt Palace, Room 253B Session T614 (5 – 6:30pm) Tuesday, June 26, 2018

ATTENDANCE

Name	Institution
Holly Matusovich	Virginia Tech
Jeremi London	Arizona State Univ./ Virginia Tech
Bryce Hughes	Montana State Univ.
Beth Cody	National Academy of Engineering
Beth Myers	Univ. of Colorado-Boulder
Amir Hedayati	Colorado State Univ.
Matthew Verleger	Embry-Riddle Aeronautical Univ.
Jennifer Bekki	Arizona State Univ.
Samantha Brunhaver	Arizona State Univ.
Grenmarie Agresar	Univ. of Michigan
Trish Koman	Univ. of Michigan
Cassandra Groen	Virginia Tech
Mike DeAntonio	New Mexico State Univ.
Stephanie Cutler	Penn State
Sarah Zappe	Penn State
Euan Lindsay	Charles Stuart Univ.
Luciana Barroso	Texas A&M Univ.
Jim Morgan	Charles Stuart Univ.
Ahmed Dallal	Univ. of Pittsburg
Jake Grohs	Virginia Tech
David Knight	Virginia Tech
Nathan McNeill	Univ. of Colorado-Boulder
Atsushi Akera	Rensselaer
Eckhard Groll	Purdue Univ.
Henriette D. Burns	Washington State Univ. – Van
Bahar Memarian	Univ. of Toronto, Canada
Lee Martin	Univ. of California – Davis
Aditya Johri	George Mason Univ.
Daniel Knight	Univ. of Colorado-Boulder
Hnihni Wang	Jacksonville Unv.
Susan McCahan	Univ. of Toronto, Canada

Patrick Cunningham	Rose-Hulman Institute of Technology
Aimee Cloutier	Rose-Hulman Institute of Technology
Scheil Fatehiborougeni	Purdue University
Diana de la Rosa-Pohl	Univ. of Houston
Elena Rangelova	Univ. of Calgary, Canada
Ivan Detchev	Univ. of Calgary, Canada
Matthew Bahanson	North Carolina State Univ.
Julie Martin	Clemson Univ. /National Science
	Foundation
Rachel Anderson	Clemson Univ.
Steve Mattucci	Engineering Change Lab, Canada
Kelsey Rodgers	Embry-Riddle Aeronautical Univ.
Maura Borrego	Univ. of Texas-Austin
Will Tyson	Univ. of South Florida
Lisa Benson	Clemson Univ.
Adam Kirn	Univ. of Nevada – Reno
Alexandra Coso Strong	Olin College/Florida International Univ.
Erin McCave	Univ. of Houston
Courtney Faber	Univ. of Tennessee- Knoxville
Hans van Oostrom	Univ. of Florida
Monique Ross	Florida International Univ.
Tamecia Jones	North Carolina State Univ.
Justin Major	Purdue Univ.
Cindy Lee	Clemson Univ.
Adam Carberry	Arizona State Univ.
Peter Wesley Odom	Purdue Univ.
Allison Godwin	Purdue Univ.
George Ricco	Univ. of Kentucky
Brent K. Jesiek	Purdue Univ.
Swakshana Lal	Curtin University, Australia
Joyce Main	Purdue Univ.
Kerrie Douglas	Purdue Univ.
Emily Dringenberg	Ohio State Univ.
Deb Grzybowski	Ohio State Univ.
Beth Eschenbach	Humbolt State Univ.
Monica Cardella	Purdue Univ.
Bill Oakes	Purdue Univ.

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Vignesh Subbian	Univ. of Arizona
Jaqi McNeil	Univ. of Louisville
Alice Pawley	Purdue Univ.
P.K. Imbrie	Univ. of Cincinnati

MEETING MINUTES

Holly Matusovich brings the meeting to order at 5:00pm Notes taken by Jeremi London, ERM Secretary-Treasurer

- I. Welcome & Review of Agenda by Holly Matusovich
- 2. Consent Agenda (Attached)

Reports from ERM leaders:

- Secretary/Treasurer Jeremi London
- Vice Chair for ASEE 2017 Matthew Verleger
- Vice Chair for ASEE 2018 Deborah Grzybowski
- Vice Chair for ASEE 2018 Joyce Main
- Vice Chair for FIE 2017- No report requested
- Vice Chair for FIE 2018- Beth Eschenbach
- Vice Chair for Publications Geoffrey Herman
- Nominating Committee Monique Ross
- Apprentice Faculty Grant Committee Samantha Brunhaver and Jennifer Bekki
- Helen Plants Award Committee Jagi McNeil
- Dasher Award Emily Dringenberg
- Best Paper Award for 2018 ASEE Conference Jake Grohs
- Diversity Delegate/At Large Director Beth Cady
- Directors- Brent Jesiek, Alex Strong, Mathew Verleger, Allison Godwin
- Director at Large- Justin Major

Motions to approve the consent agenda: Adam Carberry, Monica Cardella (2nd) Motion carried.

- 3. Introductions around the room; each attendee announced their name and institution. (See attendance list above).
- 4. Updates
 - a. FIE 2017
 - i. ERM received a large, unexpected bill from FIE (~\$15k). The FIE 2017 conference took place in October. The information about this expense was available in November 2017, but there was a breakdown in

- communication that resulted in the ERM leadership finding out about it until June 2018.
- ii. There is a need to improve the communication channels about FIE. There is also a need to find out what happens and how to pay the bill.
- iii. Since 2008, ERM has made \$108k. This is the first time in a long time there's been a loss. We are not sure exactly how this happened or if we can afford to pay the bill. The main reason for why there was a loss this year was because of low attendance. (Many international people did not come because of the travel ban and it was right after the hurricane in Puerto Rico.) Better attendance is expected for next year.
- iv. Questions in the steering committee: There are a lot of people that did not go to FIE because they had other places to go (e.g., other dissemination outlets, EEC PI meeting around the same time). FIE started as a place for engineering education pioneers to have a community, and to some extent that mission was achieved. There may be a need to revision its purpose and how it fits within the larger set of activities going on in the engineering education community.

b. FIE 2018

- i. This year, FIE received ~900 abstracts for FIE 2018; this is high. There are discussions about raising the registration fee for next year.
- c. Distinguished Lecture (Matt Verleger, Program Chair for Columbus ASEE)
 - i. There was a mix-up regarding the Distinguished Lecturer. See Appendix A notes for details.
- d. Breakfast/Lunch of Champions (Organized by Alex Coso Strong & Brent Jesiek)
 - i. The event was well attended: 30 new members; 10 veterans.
- e. JEE Review Award (Lisa Benson)
 - i. JEE just initiated a new award to recognize reviewers that are doing an outstanding job. This award is based on things like a constructive tone, useful feedback, and timeliness of the review.
 - ii. They are developing a review process for determining who will receive the award.
 - iii. Four winners will be awarded at the Brouhaha.

5. Thanks Yous

- a. Outgoing Leaders
 - i. Jeremi London Secretary Treasure
 - ii. Alex Coso Strong and Breng Jesiek Directors
 - iii. Jim Morgan FIE Steering Committee
 - iv. Matthew Verleger Program Chair
 - v. Monica Cardella Outgoing Chair
 - vi. PIC Chair
 - vii. AFG Awards
- 6. PIC Chair Report Terri Reed

- a. ERM is 30% of almost all measures.
- b. Terri.
- c. Announcements: FY17 finished with \$350K in reserve, which aligns with the policy. Long term goal. Good fiscal responsibility is 25% of \$10M. FY18 looking good. Credit is improved and if we need to go for it we ened it.
- d. BASS accounts will be accessible online in 2018.
- e. Conference update:
- f. Registration: 3,000, but may change bccause of walk-in regisgrations
- g. Instituted a code of conduct for the conference. Have appointed an ethics committee. Now working on policy and proceedures around that.
- h. Updating the PIC by-laws
- i. Swag: free pins and posters
- j. Awards: please consider looking at the national awards. Nominations have fallen dramatically. Need to increase them.
- k. Can have two people accessing Monolith, the program chair plus others.
- I. Feedback
- m. Likes seeing kids around. Offered free childcare.
- n. All gender-neutral things: bathrooms
- o. Gave voice to those that don't feel like they are served well. May be exploring the idea of a new PIC.
- p. Terri is a great advocated for ERM.
- q. Need to discuss how the distinguished lecture. Where were the gaps? How can it be addressed?
- r. Need to improve communication between the ASEE Controller and ERM Treasurers

7. Opportunities to Get Involved with ERM

- a. Standing Committees: Nominating, Diversity, Best Paper, AFG
- b. Special Committees Emerging from the ERM Business Meeting and Director Efforts
- c. FIE Steering Committee
- d. Vice Chair for FIE 2020
- e. Submit papers to ASEE and FIE
- f. Join committees (Ex. reviewers for best paper, AFG, specials sessions at FIE, etc.)

8. Other Business

- a. Update from Diversity Committee (Beth Cody):
 - i. There is a website: diversity.asee.org
 - ii. Divisions need a statement
 - iii. Annual report was sent to Holly M.; it can be
 - iv. Code of conduct is new this year. It will be work in progress. More work will be done by the ethics committee.
 - v. Examples of New things: scooters, closed captioning, gender neutral bathrooms.

- vi. Holly can give me those and we can add to them.
- 9. Brainstorming and Planning
 - a. Charge to each group:
 - i. We got to where we are for reasons. Identify the challenges. What additional data do we need? Don't just right to solutions. Want to avoid unintended consequences.
 - b. Topics
 - i. Review Process
 - ii. Engagement of Students
 - iii. Brouhaha
 - iv. FIE

For this portion of the meeting, attendees joined the table associated with the topic they in which they were most interested. Those at the table appointed someone to take notes of the highlights from the discussion. The notes were shared with Holly after ASEE, and included in Appendix B.

Appendix A: Reports from ERM Officers

Chair

Submitted by Holly Matusovich on June 21

In her report last year, Immediate Past Chair Monica Cardella outlined four priorities for the division and I believe they remain essential:

- Being a welcoming division
- Providing opportunities for people to get involved with ERM
- Ensuring that our paper review processes are fair and consistent
- Connecting with other divisions and communities.

Being a welcoming division is my highest priority, as I believe it is also an outcome of the other three priorities as well.

With regard to providing opportunities for people to get involved with ERM, we have made progress but there is more work to do. For example, in an effort to invite people in, I used a survey to seek volunteers for various committee member and committee chair opportunities. Unfortunately, not all volunteers were matched to an opportunity. I can see now that it may have been frustrating for people to volunteer but not be contacted with an opportunity to engage. We have also come to realize that there is an assumption that program chairs and other ERM officers can support their own travel expenses to ASEE but that this funding expectation may limit people from pursuing these positions. The ERM Board has begun conversations on how we can address this concern. A focus for the next year will be on increased opportunities to engage with ERM, as there is much we can accomplish. To that end, we plan to launch several additional working groups, led by the Directors, following the brainstorming sessions at the Business Meeting at ASEE and we will seek volunteers.

ERM has also done great work improving the paper review process in recent years, including additional training on review processes and revising how we assign reviewers to papers. Unfortunately, we continued to face some challenges this year as noted in the report by Deb Grzybowski. Also, several authors appealed directly to me and/or Deb regarding reviews and our process with one author appealing all the way to the top of ASEE. Notably, this situation made visible that ASEE at large does not have an appeal process in place. Beth Eschenbach notes several changes FIE is trying for 2018, and ERM might consider some of those points for ASEE. The review process will be a working group for the coming year.

Finally, with regard to connecting with other Divisions, we have several efforts underway though we can do more here as well. First, we started a focus on connecting with graduate students in particular. About mid-year, I appointed Justin Major as a Director at Large to focus in this area. As detailed in his report, he has connected with leaders of the student division and has many great ideas for the year ahead. Second, we have also connected with other divisions by co-sponsoring events at ASEE. Finally, Beth Cady agreed late Spring to represent ERM on ASEE Committee for Diversity, Equity, and Inclusion

I look forward to productive brainstorming session at the Business meeting and forward action planning to follow thereafter.

Secretary/Treasurer Report

Submitted by Jeremi London on June 4, 2018

ASEE accounting has gotten much better at providing timely updates on account details (i.e., transactions, balances). The new Controller provides quarterly reports; the last two reports reflect financials leading up to September 30, 2017 and March 31, 2018, respectively.

Account balances as of March 31, 2018 are as follows:

BASS Account: \$33,761.19 Operating Account: \$319.00

This total includes a new recurring expense called "ASEE Administrative Fee". However, these totals do not reflect transactions that took place in April and May 2018. Examples of expenses that are not included are those associated with the winners of the 2018 Apprentice Faculty Grants, and the ERM Brouhaha for ASEE 2018.

Vice Chair for ASEE 2017

Submitted by Matthew Verleger on June 2, 2018

ERM Submitted two proposals for distinguished lectures. The first was a proposal for a joint session on inclusion with Tom Litzinger and Allison Godwin. The underlying idea was to have Allison as an upand-coming researcher in the field with a strong research focus and Tom as a seasoned practitioner. The thought was to provide complementary perspectives on the field. This proposal was denied, largely because the PIC Chairs felt that a junior faculty member could not be considered "distinguished".

The second proposal was to have Tom Litzinger talk about his perspective on the field and its evolution, where we have been and where we are going. This was in keeping with the 125th anniversary of ASEE. That proposal was accepted by the PIC chairs and was originally scheduled into the program. Independent of the PIC chair selection, ASEE had formed a 125th anniversary committee who added an additional lecture this topic. That session is a panel session with Stephanie Adams, Karl Smith, and Donna Riley. That panel session was not reviewed or selected by the PIC Chairs, but was instead added by the ASEE Board of Directors. On seeing this new session on the schedule, Tom elected to withdraw from his talk to allow the panel session to be more successful. Many alternative options were discussed, ranging from keeping both sessions, adding Tom to the panel, or having ERM co-sponsor the panel session, but none of these options successfully came to fruition.

Vice Chair for ASEE 2018

Submitted by Deb Grzybowski on June 7, 2018

Conference Papers:

The call for papers and paper guidelines were posted on September 7, 2017. Of note:

- I. "Special Sessions" were eliminated and replaced with the "Panel of Invited Speakers." This created some confusion, but hopefully will be smoother in the future.
- 2. Co-chairs are now allowed in Monolith and should be considered next year. It would be useful to have someone to cover if the chair has to travel, etc.
- 3. Program scheduling changes included not beginning sessions on Sunday until Ipm, and Workshops will have only one time slot Sunday 9am noon. Additionally, changes in the Program grid (workshops Sunday at 9am, and Plenary Monday at 8am) did not allow for a Breakfast with Champions. This necessitated changing the format to a lunch with is more costly and should be discussed with ASEE for next year's planning.
- 4. The page limits initiated last year were continued forward in the guidelines. However, as noted previously, many authors do not read the guidelines. Papers were not rejected due to length but the issue was noted in reviews.
- 5. WIP's this year were either assigned to one of two sessions devoted to WIP's and the format of these was left to the session moderators. Where a WIP topic fit nicely into a paper sessions' theme, and there was room for one more paper, I scheduled them into that session. I'll be interested in getting feedback as to how this works out.

Issues to address in future:

- I. WIP's continue to be an issue with (as noted above) authors not reading the guidelines, there is no way to identify a WIP if the title doesn't include it as requested. It becomes apparent sometimes when reviewing because of the length of the paper.
- 2. Keywords and "Paper interests" are able to be added by the author, and in most cases, are not. These pieces of information would help tremendously when assigning reviewers and more importantly, assigning papers to sessions. I don't know if this is possible, but I recommend that these be required in the future.
- 3. Another item that needs to be emphasized is the requirement to identify the type of paper in the first sentence. This is noted in the paper guidelines, and does assist reviewers. Somehow we need to emphasize the importance of this requirement and this would also assist with the WIP issue.
- 4. Another issue came from authors requesting papers to be moved to different sessions after they were assigned some more than a month after being assigned. Changes made in this timeframe are not included in the printed program and many of them were after I sent guidelines to the session moderators. It is much easier to accommodate a travel issue (hence necessitating moving a paper) before papers are assigned to sessions. A note about this should be added to the author guidelines.
- 5. An issue to address with Monolith is to include the requested number of reviews with the reviewer information download. Otherwise, this information is requested &

submitted by the individual but not readily accessible for the person assigning papers to reviewers. I had to track this independently from Monolith by creating a spreadsheet with all reviewers, copying their response which I could see online to the spreadsheet, and then tracking which papers I assigned to each reviewer. Seems like this should be automated!

- 6. Another reviewer issue is how to keep track of whether authors have agreed to review as we request and whether they submit reviews.
- 7. Monolith now has put a block on author conflicts which would not allow me to schedule a paper into a time slot if they are presenting in another division at the same time. This makes sense, but caused many difficulties for some papers/authors. So if a paper is in a session that doesn't seem to make sense that's probably why. In future, I suggest assigning papers to session as soon as you can.

Submissions:

239 abstracts submitted

- 37 abstracts rejected, 201 sent to draft review
- 37 abstracts withdrawn after review
- 38 abstracts were past deadline (didn't submit paper)
- 10 draft papers rejected
- 3 papers withdrawn after draft review
- 2 papers asked for a rewrite and did not submit requested revision
- I I 2 accepted & finalized for publication

Reviewers:

- 249 Accepted reviewers
- After comparing all authors with accepted reviewers, I sent out separate invitations to authors who did not volunteer as reviewers. This resulted in 42 additional reviewers.

Panel of Invited Speakers and Workshops

This year we had 3 Panels of Invited Speakers sessions and 5 Workshop proposals submitted. All were put through peer review. Two of the 3 Panel of Invited Speakers were accepted. The Panel that was rejected was recommended to submit as a Workshop, which they did. All 5 Workshop proposals were accepted by the ERM review, and all were accepted by the PIC chairs. One Workshop was cancelled by the authors after conference registration began due to travel issues. One Workshop was not peerreviewed, this is an ongoing relationship with the Biomedical Engineering Division presented annually: "ERM Presents: Moving Beyond Research Ideas".

Other ERM Sessions

ERM will be participating in the Division Mixer on Sunday evening, 4:30pm – 6:00pm. ERM is sponsoring a welcome lunch for new members on Sunday, 1:15pm – 2:45pm at the Marriott HQ Hotel. Many thanks to Brent Jesiek for planning this event! ERM has 20 Technical Sessions

Looking Ahead

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Many thanks to Lisa Benson & Matthew Verleger for compiling and editing the Program Chair Handbook. This document was incredibly helpful and has been edited to pass onto Joyce and future Program Chairs.

Vice Chair for ASEE 2018

Submitted by Joyce Main on June 9, 2018

The Brouhaha will be held at the Clark Planetarium on Tuesday, June 26th, 7-9pm. As of June 7, 2018, there were 76 registered to attend, such that attendance will likely be similar to last year's.

The following announcement regarding the Brouhaha was shared via the ASEE ERM listserv:

Join us for the ASEE ERM Brouhaha—our annual social gathering where you can catch up with old friends and make new connections. Our Brouhaha will be on Tuesday, June 26th, 7-9pm at the Clark Planetarium. Located in downtown Salt Lake City near the Convention Center and next to the TRAX Planetarium stop, there will be plenty to see and do at the Clark Planetarium! Enjoy the ERM annual awards ceremony, meet this year's Apprentice Faculty Grant awardees, and explore the Planetarium's impressive meteorite collection. There will be a DJ playing music, and the dinner will be catered by one of Salt Lake City's top caterers, LUX catering.

Tickets are \$75 if purchased in advance, and \$85 at the door. We would appreciate early registrations, so that we can provide the caterer with accurate attendance information. Please note any dietary restrictions/preferences during your online registration. We are looking forward to seeing you at this year's Brouhaha!

Vice Chair for FIE 2018

Submitted by Beth Eschenbach on June 20, 2018

The FIE 2018 Technical Program Committee looks forward to seeing you in San Jose this October. We will not know our final paper count until July, but here is the current status.

Accepted full papers and WIPS: 215

Accepted Special Sessions: 14

Accepted Workshops: 7,

Accepted Panels: 4

Accepted with minor revisions full papers and WIPS: 41 Accepted with major revisions full papers and WIPS: 254

Accepted with major revisions Workshops: I

Accepted with major revisions

Special Sessions: 2 Accepted as a WIP: 39

Accepted total: 577, Rejected: 82

Please note that some proportion of the 254 papers requiring major revisions will not be accepted by the final due date of July 9.

Positive Changes

- We will have a PhD Student Symposium for approximately 12 early to mid career PhD students on the Wednesday before the conference. This daylong event will cost \$25, include lunch and coffee, occur on October 3, and be facilitated by Tony Clear and P.K. Imbrie. Watch the FIE 2018 site for more information. Be sure to tell your students!
- Just like ASEE, FIE will try some non-traditional formats for WIPs.
- We required authors to sign up to review at least two papers. This change resulted in fewer papers requiring emergency reviews at the end of May. Please note that there is no penalty to an author (at this time) for not reviewing papers. What do ERM members think the author review policy should be?
- We have two Technical Program Chairs (TPC) for each society for the first time this year. When communication was thin with one of the two, to other one was available to help. One of the two chairs will continue on next year so that institutional memory is better maintained.
- With 6 TPCs, each TPC was responsible for reviewing about 150 abstracts and supporting about 100 papers through the review process. This workload reduction is an improvement.
- Authors who receive a review of "Accepted with Major Revisions" are required to submit a document explaining how they addressed the reviewer comments. We are still waiting to see if this process is an improvement. In some cases, when a paper might have been rejected immediately, the TPC provided feedback that the author could then attempt to address. The TPC will review the submissions and decide if the final manuscript is acceptable. One possibility is to require that the reviewer check that the author revisions and decide if the paper is acceptable. What do ERM members think of this approach that is already used for ASEE?

Concerns/Suggestions for Next Year

• Each paper received a similarity report. There were a large number of papers (~50) with similarity reports over 35%. Some of these papers were presented in prior FIE conferences, but did not reference that prior work, nor explain how the paper was a new contribution or built on that prior work. Some papers were just recycled papers. Some literature reviews were literally cut and paste from prior work. IEEE has a plagiarism policy that FIE must follow. A subcommittee of the FIE Steering Committee closely reviewed about 13 of these papers and sent letters to those authors. If the authors cannot satisfactorily respond to the concerns of the committee, those authors

will be sanctioned by IEEE. What do ERM members think? Should FIE show authors their similarity reports when they submit? (Not sure the technology exists?) Regardless, the review process needs to be improved next year so that the similarity reports are reviewed sooner. (The reports were reviewed around June 1 rather than May 1.)

- Some reviewers wanted a statement within the paper that IRB approval had been sought and received. Should FIE require such a statement? Should WIPS have results to be accepted to FIE? Reviewers need clearer guidelines.
- Food is very expensive in San Jose. The conference fee is barely covering the cost of food alone!
- The reception will probably be lower budget because of the food expense. Do ERM members have any comments about the Thursday Night Reception
- The entire time that I have been on the FIE Steering Committee, we have been working on improving quality of reviews. Two suggestions for next year are:
 - o Provide some detailed instructions on how to review a paper.
 - Require more written feedback from reviewers... such as requiring a textbox for each.....
 - Describe the contribution of this paper to the FIE community
 - Describe the strengths of this paper (Please consider content, writing and format)
 - Describe the areas to improve this paper (Please consider content, writing and format) If this paper is accepted with Major Revisions, the author will need to address these issues. Please write your comments here in a way that the author can address your concern in a straightforward way.

Observations

- About 50% of the abstract submissions are from IEEE Ed Soc.
- Process seems less stressful and improved since I was TPC for FIE 2005 in San Diego.

Vice Chair for Publications

Submitted by Geoffrey Herman on June 2

Migration of the ERM website was finished this year with the site accessible from both erm.asee.org and sites.asee.org/erm.

Nominating Committee Report

Submitted by Monique Ross on June 19

Nominations for ERM officers were solicited from the ASEE community via the ERM monthly report. There were two nominees for Secretary-Treasurer and four nominees for Directors. In

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accordance with the by-laws the ASEE membership was instructed to elect one candidate for Secretary-Treasurer and two candidates for Director. Election results were collected via Qualtrics and reviewed for quality and accuracy by Dr. Nicole Pitterson.

The newly elected ASEE ERM officers include:

- Director -Dr. Aditya Johri (George Mason University)
- Director -Dr. Samantha Brunhaver (Arizona State University)
- Secretary/Treasurer Dr. Tamecia Jones (North Carolina State University)

All of the elected officials accepted their roles and are anxious to serve the ASEE community.

Apprentice Faculty Grant Committee

Submitted by Samantha Brunhaver and Jennifer Bekki on June 1

We received 21 applications for the 2018 ASEE ERM Apprentice Faculty Grant (AFG) program. We asked previous AFG award winners and current ERM members to be reviewers for this year's award selection, and were thankful to have 24 members step forward. We had a very competitive set of applicants, and the final decision was difficult to make. We named four AFG winners:

- Cory Brozina, Youngstown State University (mentored by Lisa Benson)
- Elif Eda Miskioğlu, Bucknell University (mentored by Cindy Atman)
- Rachel Anderson, Clemson University (mentored by Shane Brown)
- Stephen Secules, University of Georgia (mentored by Alice Pawley).

Each AFG recipient will receive a travel grant to the 2018 ASEE Annual Conference in Salt Lake City. The recipients will also be guests of honor at the ERM Brouhaha on Tuesday evening, June 26th.

Helen Plants Award Committee

Submitted by Jaqi McNeil on June 15

The Helen Plants committee reviewed 13 special sessions at FIE 2017. It was difficult to get a committee member at each special session. The other two divisions were going to create a 2nd committee member for the Helen Plants Committee to meet the increasing need. I recommend ERM also create a 2nd committee member so there is equal representation by all divisions. Although, I haven't heard from either of the committee members on whether this would happen for 2018.

The Helen Plants special sessions evaluation forms that were filled out by participants were scanned and emailed to the workshop presenters after a winner was decided. This was a way for special session workshop presenters to get feedback on the workshops. Next year, presenters will have a Helen Plants Presenter form to fill out asking if they want scanned copies of the evaluations and an email address to send participation evaluation forms.

The session that won the Helen Plants award goes to "Teaching to Promote a Growth Mindset," Presenters: Sarah Zappe, Stephanie Cutler, and Thomas Litzinger (Penn State Univ, USA). The facilitators directed the session with a variety of activities that articulated the theme of growth mindset. The session organizers effectively facilitated an interactive workshop environment where the participants were highly engaged. The central theme of the session was progressively led to stimulate a deep reflection amongst the participants. This workshop had the highest ratings, was very well attended, and had encouraging comments on the feedback rubric.

Dasher Award Committee

Submitted by Emily Dringenberg on June 13

I got in contact with Russell Meier and Deborah Trytten--because papers are not yet finalized, we have not begun our work on the review process. We plan to either coordinate at ASEE this summer or teleconference once we can begin our committee work. Thanks!

Best Paper Award for 2018 ASEE Conference

Submitted by Jake Grohs on June 21

The entire pool of ASEE ERM papers was filtered so that any full paper receiving at least I score of Best Paper or at least 2 scores of Excellent were considered. Work in progress papers are not eligible for best paper. These methods followed previous precedent in the Best Paper Award review process. This filtering identified four paper nominees and each of the four papers was reviewed by each member of the committee which included Nicole Pitterson, Stephen Secules, Prateek Shekhar, and DeLean Tolbert. The winning paper received both the highest overall average score across reviewers, and was rated as the top paper of the nominees by three of the four reviewers. The winning paper is: "Gender, Motivation, and Pedagogy in the STEM Classroom: A Quantitative Characterization" by Jonathan D. Stolk, Yevgeniya V. Zastavker, and Michael D. Gross. The winners will be formally announced and recognized at the ERM Brouhaha.

Diversity Chair

No report as Beth Cady was only appointed recently.

Submitted by Holly Matusovich: In the future, the Best Diversity Paper review process will fall under this position. This year the process was managed by Holly Matusovich and Deb Grzybowski. We had one paper nominated during the review process and we determined the paper deserved this award. On our Spring PIC call, other divisions reported challenges with identifying and evaluating diversity papers. The winning paper is: "Gender, Motivation, and

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Pedagogy in the STEM Classroom: A Quantitative Characterization" by Jonathan D. Stolk, Yevgeniya V. Zastavker, and Michael D. Gross. The winners will be formally announced and recognized at the ERM Brouhaha.

Directors

Submitted by Brent Jesiek on June 1

Brent led organization of this year's ERM Lunch with Champions event, which will likely be a vibrant due to an oversubscribed attendee list and plenty of ERM volunteers willing to join and help. He also led development of a research quality workshop with a team comprised of faculty from Purdue and University of Georgia. The workshop was piloted to an overflow crowd at the NSF EEC grantee's meeting in October 2017, and will be revised and run again as a longer duration workshop at the 2018 ASEE conference.

Submitted by Matthew Verleger on June 2

Matthew helped with the ERM Lunch with Champions event that was spearheaded by Brent.

Submitted by Alexandra Coso Strong on June 3

Alexandra supported the ERM Lunch with Champions event that was led by Brent.

Submitted by Allison Godwin on June 4

Allison supported and is a part of the research quality workshop led by Brent. She also organized the annual meeting of the PEER Collaborative Unconference for June 27 and 28 after the ASEE conference. The PEER National Network is a peer mentoring network for early career tenure-track or mid-career tenured faculty who focus on doing engineering education research. This event is not directly a part of ERM activities, but many ERM early-career faculty attend. There may be opportunities for ERM to more closely work with the unconference for organizational support in the future.

<u>Director at Large (position appointed by Matusovich for two years, started midacademic year)</u>

Submitted by Justin Major on June 6

Justin met with student leaders in both the local (Purdue) and larger Student Division to discover ways in which ERM can better recruit, serve, and retain students and beginning faculty to the division. There have been many findings for consideration. One of which is that that collaborative groups in ERM can develop webinars and videos to share the research coming out of the division, and to teach about different methodologies and pedagogies. Justin has been in conversation with ASEE education about the ways this could happen.

Other concerns:

- Students and young faculty see ERM and Brouhaha as the type of place that is invite-only or for "the big players". Moving forward, it will be key for members to invite other

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- members to events any time they can to remove that barrier. The considerable cost of Brouhaha is necessary to review as well.
- Most of what ERM does is unknown to outside members and may be an enticing reason for individuals to become a member of the division if they know. An idea that has been presented is to encourage session moderators to advertise sessions, socials, resources, and division benefits at the start and/or end of sessions from a pre-written script.

Appendix B: Reports from Note takers During Breakout Discussions

Review Process

Submitted by Allison Godwin on June 25, 2018

Attendees: Matthew Verleger, Allison Godwin, Lee Martin, Lisa Benson, Alice Pawley, George Ricco, Jeremi London, Courtney Faber, Jennifer Bekki, Diana de la Rosa-Pohl, Bryce Hughes, Atush Akera, Maura Borrego, Stephanie Cutler, Henri Burns, Vignesh Subbian, Euan Lindsay, Sulakshana Lal, Beth Cady, Jake Grohs, Tamecia Jones, Monique Ross, Amir Mehdiabadl, Jennifer Turns

Discussion of challenges.

Scale of problem:

We as a division have a highly diverse set of papers. A lot of different members (~1700 members). Difficult for program chairs to assign reviews because Monolith gives no information. Monolith only gives numbers of cumulative reviews. Alignment is difficult for research topic and reviewer expertise. 250 papers that each need 3 reviewers. We have one of the largest volumes of papers.

Quantitative, qualitative, mixed methods expertise and paper compatibility issues.

Particular issues discussed:

- Multiple types of papers: methods papers, WIPs, theory, etc.
- Research paradigms (quantitative, qualitative, mixed methods)
- Methods that are "standard" not accepted
- Diversity
- Some experiences with reviewers' comments are personal; not based on what is in the paper or incorrect.

How do we shepherd student reviewers who may be less experienced through the process?

Some papers with only one review.

Individuals are supposed to include the type of paper in the first sentence; often not done.

Issues with being assigned papers that conflict of interest.

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ERM = Educational Research and (Teaching) Methods, but that is not clear.

Publish to present conference. Not just ideas; not journal quality paper either. Reviewer expectations may not be aligned with the implicit criteria for review.

Want to back reviewers' decisions and authority. Need to develop robust structure that works. What works in other places?

Why are reviewers taking reviews that they are not qualified for? Reviewers don't accept reviews. Put on reviewers to email if issue. No systematic way for this process to happen.

What data do we need?

Identification of type of paper by authors

Reviewer expertise

Matching reviewers with papers

Conflicts of interest

Request for appeals process

What is the system capable that is not "turned on"?

What are solutions that we can use to get around issues that can't be changed in Monolith? How widespread is the problem for individual papers? What's the likelihood of getting an unqualified reviewer?

Do we need a program committee to help read all of the reviews to make decisions rather than just one person?

EDAS has features (while imperfect) that are a model that does these things?

Option for authors to rate how useful review is; option for reviewer to mark how confident they are in their expertise of the review.

Initial food for thought:

Appeals process – doesn't exist

Qualitative papers have not won Best Paper Award in the past several years (did not touch on this topic at all)

Clarify what we mean by diversity papers

Engagement of Students

No report submitted by July 27, 2018

Brouhaha

Submitted by Samantha Brunhaver on July 4, 2018

People have come to expect certain things from the event -- good food, good venue/entertainment, walkable, family friendly. Previous program chairs spoke about

- pressure to keep the experience the same and give people what they've come to expect.
- ➤ On the food -- some expressed disappointment about the quality, especially for attendees with special dietary restrictions. Julie and Joyce (both of whom have planned recent Brouhahas) noted that food is just one expense in addition to reserving the venue, booking the entertainment, etc. Also, ticket costs can be driven up in part by minimum order requirements set by the venue or by needing to over-order to make sure there is enough food for everyone who attends. The budget is relatively static from year to year -- about \$12,000 -- and it can be easier or harder to get high quality food depending on location.
- On the venue/entertainment -- folks noted that the event used to be more structured, with a formal social program in addition to the awards ceremony. Now, the focus seems to be more on networking and community building, which is fine, except that people may not want to have to pay money to do more of what they've already been doing at the conference. There was another comment that some past venues seemed like a lot of money for little benefit. Examples include reserving space in a museum after hours when there's not access to the exhibits, and reserving a ball park but having the games and entertainment in a different location than the food and drink, etc. The restaurant in New Orleans was mentioned as striking a good balance between practicality and ambiance. Matt Ohland offered that the best Brouhaha ever was at the Children's Museum in Kansas City, where folks had run of all their interactive exhibits.
- > On walkability -- some suggested renting shuttles or asking folks to car share, to save costs on a venue further away from the convention center.
- > On family friendliness -- questions were raised about whether the event needs to be family friendly, whether more people would come to the event if they felt they could take their kids there, and whether this would be a net benefit or a net loss.
- Many program chairs have needed to use event planners (e.g., in Atlanta, New Orleans, etc.) Having the program chair somewhat local (e.g., Jay in Tampa Bay) might be helpful for saving costs.
- There was a recommendation to look at how other divisions put on their events. Where do they hold them, how much do they charge, etc. Other divisions also seem to have industry or foundation sponsors -- who could help sponsor us?
- Grad students and other new members potentially see the high ticket cost as a barrier. Consider subsidizing the costs of tickets for graduate students. This would require raising the cost of everyone else's ticket, since ticket costs barely cover operating expenses for the event.
- > Typical attendance and budget is about 150 people. For some reason, ASEE lowered the number of tickets from 150 to 100 this year, so Joyce planned for 100. ASEE then raised the number back up to 150 without notifying the appropriate people in time to make changes, so there may not have been enough food. There needs to be better channels of communication here -- by when does ASEE need to know information from us, and when can we expect information from then?

<u>FIE</u>

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Submitted by Elizabeth Eschenbach on June 27, 2018

Author Reminders

- Check your score before submitting
- ➤ Provide authors the decisions of given levels of % of similarity. For example, 25% from a single document as of IEEE.
- Is there a way to reject the submission of the paper if the self similarity is too high?
- ➤ 60% novel for ASEE for ERM

Appeals Process, what is it?

> Should we have a session or set of videos or some way to educate our authors? Being able to check ahead of time.

WIP

Need to be clear that a WIP is a WIP to reviewers.

Reviews

- List of terms is too long for checking the reviews
- > Feel IEEE folks are giving poor reviews
- ➤ I do not go to FIE because of poor reviews
- Reviews piss me off every year. Why do I even want to participate?

Struggling with the deadlines.

- Papers were due when final papers with ASEE were due
- > Revise and submit were due before ASEE
- Abstract deadline is same as ASEE paper draft is due.
- Work harder to avoid to ASEE deadlines.

Workshops, SSPW, clearer

What is quality? If we need to be more selective, then how do we communicate that to authors prior to submission and to reviewers in the rubrics