

ASEE Multidisciplinary Engineering Division Business Meeting Minutes

ASEE'S Virtual Conference Session F541, 3:00 PM – 4:00 PM EST

June 26, 2020

Meeting convened at 3:00 p.m. at asee20.pathable.co virtual platform

1. Welcome from the Division Chair, A.J. Hamlin and Attendance: 22 Multi attendees

A.J. Hamlin	ahamlin@mtu.edu ;	(Division Chair)
Jean Kampe	kampej@mtu.edu ;	(Past Division Chair)
Cindy Barnicki	barnickc@msoe.edu ;	(Program Chair)
Lynn Albers	lynn.albers@hofstra.edu ;	(Secretary/Treasurer)
Duncan Davis	d.davis@northeastern.edu ;	(K-12 Representative)
Victoria Bill	victoria.bill@nyu.edu ;	(Incoming CDEI Delegate)
Jean Bossart	jean.bossart@ufl.edu ;	(Outgoing CDEI Delegate)
Alyson Eggleston	aegglest@citadel.edu ;	
Dr. Anderson D. Prewitt	anderson@prewittsolutions.com ;	
Cedrick Remi	513-360-8625	
Mark Novak	417-559-5604	
Chris		
Olanrewaju Olaogun		
Cecelia Wigal	cecelia-wigal@utc.edu ;	
Dennis Silage	silage@temple.edu ;	
Edward Latorre	elatorre@ufl.edu ;	
Jack Bringardner	jack.bringardner@nyu.edu ;	
Julie Sonnenberg-Klein	jsk@gatech.edu ;	
Pauline Melgoza		
Mike Gennert	michaelg@wpi.edu ;	
Rebecca Reck	asee@rebeccaee.com ;	
Richard Goldberg	r.goldberg@unc.edu ;	
Rungun Nathan	rungun.nathan@psu.edu ;	

2. Business Meeting Minutes from June 17, 2019 were presented by Cindy Barnicki. A motion was made by Duncan Davis to accept the minutes as written. The motion was seconded by Dennis Silage and passed unanimously.

3. Division officers and representatives

- Current officers (July 2019- June 2021)

- Immediate Past Division Chair: **Jean Kampe**, Michigan Technological University
 - Division Chair: **AJ Hamlin**, Michigan Technological University
 - Vice Chair/Program Chair: **Cynthia Barnicki**, Milwaukee School of Engineering
 - Secretary/Treasurer: **Lynn Albers**, Hofstra University
 - Webmaster: **Dennis Silage**, Temple University
 - MULTI delegate/representative
 - Commission on Diversity, Equity, and Inclusion:
 - § 2018-2020: **Jean Bossart**, University of Florida
 - § 2020-2022: **Victoria Bill**, NYU Tandon School of Engineering
 - P-12 Representative Committee: **Duncan Davis**, Northeastern University
 - Elections for Secretary/Treasurer to be held in Spring 2021
4. PIC II Chair Report – Peter Schmidt (University of Evansville) schedule permitting
- a. PIC Reorganization
 - i. RED scenario was the grouping that PICs felt would encourage collaboration between divisions in the same PIC.
 - ii. Multidisciplinary Division has moved from PIC II to PIC V.
 - b. ASEE Membership is declining so all are encouraged to speak with their College Deans to encourage them to renew their Institution membership.
 - c. Financial Status.
 - i. \$733k shortfall due to virtual conference
 - 1. ASEE Revenue comes from the individual dues, institutional dues, and conference registration fees.
 - ii. ASEE applied to the Payroll Protection Program (PPP) and received a \$1.1 million loan. They are hoping to convert this to a grant from a loan.
5. Division Chair Report – AJ Hamlin
- MULTI Bylaws – approved by division June 2019, to be approved by ASEE Board
 - Membership in the Multidisciplinary (MULTI) Division (1365, see next page)
6. Program Chair report – Cynthia Barnicki
- Division program demographics
 - 8 Technical Sessions, 1 Division Social, 1 Business Meeting, cosponsor on panel with systems engineering, cosponsor on distinguished lecture
 - 68 abstracts submitted which is up from 61 in 2019. 62 abstracts accepted
 - 46 draft papers; 3 rejected, 4 rewrites, 23 approved on draft
 - 34 final papers
 - 2020 MULTI best paper award presentation
 - “Practical Skills for Students in Mechatronics and Robotics Education”
7. Treasurer Report – Lynn Albers

- a. Operating Account was dissolved on 10/01/2019
- b. BASS Account \$528.39 rolled forward to FY2020
- c. ASEE Membership Allocation funds of \$1244 applied to FY2020
- d. BASS Account balance of \$1778.98 as of Q2 FY2020 (03/31/2020)

8. Webmaster Report – Founding webmaster Dennis Silage

9. MULTI Representative/Delegate Committee Reports

- Commission on Diversity, Equity, and Inclusion – Jean Bossart
 - Designation changed from Committee to Commission
 - Summer Workshops
- P-12 Engineering Education Committee – Duncan Davis
 - Classroom Grants for Engineering Education
 - Engineering Teacher Professional Development Endorsement
 - ASEE Virtual Summer Camps

10. Other Business

- Future Directions
 - Speaker from local industry at the social/dinner event.
 - Guest presentations by Zoom to classes in the future
 - Investigate why people join multi? Is it because they want to get started, are already doing, or want to share? A survey of members might give us a good place to start.
 - Looking for directions for panels and/or collaboration: Gamification, Makerspaces (talk to DEED)
 - Social Committee plan ASEE Social.
 - I think that this is a 2nd or 3rd division for many, who have a primary division that is closer to their disciplinary department. How can we leverage that?
 - Connections to makerspace is a great idea! Maybe a makerspace theme to the social?
 - A speaker or activity that emphasizes how the Multi Division can benefit disciplinary divisions.

11. Adjournment – 4:00 PM, June 26, 2020


Appendix A - Division Chair Business Meeting Slides

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**ASEE'S
VIRTUAL
CONFERENCE**

JUNE 22 - 26, 2020

At Home with
Engineering Education



**Multidisciplinary Engineering
Business Meeting**

Friday, June 26, 2020

AJ Hamlin
MULTI Chair
ahamlin@mtu.edu

Sign-in form: <https://forms.gle/Kcz9mE46kkhPCVs98>

Agenda

- Minutes from ASEE 2019
- MULTI Officer/Representatives
- Reports
 - PIC II Chair (schedule permitting)
 - Division Chair
 - Program Chair
 - Best Paper Award
 - Treasurer
- Reports, cont.
 - Webmaster
 - CDEI Delegate
 - P-12 Representative Committee
- Other business
 - Future directions

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Minutes

Review and approve minutes from 2019 Business Meeting

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Sign-in form: <https://forms.gle/Kcz9mE46kkhPCVs98>

MULTI Officer & Representatives

- Immediate Past Chair (2019-2021): Jean Kampe, Michigan Technological University
- Division Chair (2019-2021): AJ Hamlin, Michigan Technological University
- Program Chair (2019-2021): Cynthia Barnicki, Milwaukee School of Engineering
- Secretary/Treasurer (2019-2021): Lynn Albers, Hofstra University
- Webmaster: Dennis Silage, Temple University
- CDEI (2018-2020): Jean Bossart, University of Florida
- CDEI (2020-2022): Victoria Bill, NYU Tandon School of Engineering
- P-12 Representative Committee: Duncan Davis, Northeastern University

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PIC II Chair Report: Peter Schmidt

Code of Conduct for ASEE Meetings (even virtual)

- It is the policy of the American Society for Engineering Education (ASEE) that all participants, including attendees, vendors, ASEE staff, volunteers, and all other stakeholders at ASEE meetings will **conduct themselves in a professional manner that is welcoming to all participants** and free from any form of discrimination, intimidation, harassment, or retaliation.
- Disruptive or harassing behavior of any kind will not be tolerated. Harassment includes but is not limited to inappropriate or intimidating behavior and language, unwelcome jokes or comments, unwanted touching or attention, offensive images, photography without permission, real or implied threat of physical harm, physical assault and stalking.
- Download full policy at
<https://www.asee.org/documents/member-resources/resources/CodeofConductforASEEActivitiesandEvents.pdf>

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Conference Information

- General as of June 21st:
 - Number of Attendees: 3,263
 - Number of Published Papers: 1762 (down 150 from expected), +8 papers > 2019
 - Number of Unique Authors: 1423, +19 Authors > 2019
- The conference venue will be available to registered attendees for up to a year.
 - Presentations will be available as “view only” and are not downloadable.
 - A link will be made available on the Annual Conference 2020 to direct attendees back to the virtual conference platform.

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Conference Information continued

Scholarship Monies Used as of June 2nd:

- Engineering Unleashed provided \$100,000 – 200 scholarships were given totaling \$100,000.
- ASEE BoD Match provided up to \$100,000 – 257, \$200 scholarships were requested and given totaling \$51,400 thus far.
- Divisions – \$15,908 worth of scholarships have been given thus far from 18 Divisions and 1 Zone/Section. The bulk of scholarships covered the PCs at \$500 per scholarship. Some of the Divisions also provided some non-PC participants at various levels.

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PIC Reorganization

- At 2019 ASEE Conference, PIC Chairs presented three scenarios for PIC reorganization, with hopes to address
 1. Imbalance among the five PICs
 2. Structure had not been reviewed in recent years
 3. Complaints about inequities in conference best-paper selection process
- Divisions voted

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PIC Reorganization

- 46 of 53 Divisions voted (86.79%)

Most Preferred Scenario

PIC	# Div	Count	%						
				RED		GREEN		BLUE	
				Red	Strength	Green	Strength	Blue	Strength
PIC I	12	12	100.00%	6	80.25	4	49.38	2	25.00
PIC II	11	11	100.00%	6	60.75	4	67.00	1	10.00
PIC III	13	10	76.92%	7	43.79	2	26.50	1	32.50
PIC IV	14	11	78.57%	6	54.25	4	23.13	1	37.00
PIC V	3	2	66.67%	1	100.00	1	70.00	0	0.00
				26		15		5	
Voting				56.52%		32.61%		10.87%	
All Div				49.06%		28.30%		9.43%	

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How the Reorganization looks

- Current PICs and their new PICs
- New PICs

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PIC I, – Christi Luks (2 years)

	Current	New
Aerospace Division	I	V
Architectural Engineering Division	I	IV
Biological and Agricultural Engineering Division	I	I
Chemical Engineering Division	I	I
Civil Engineering Division	I	IV
Construction Engineering Division	I	IV
Electrical and Computer Division	I	III
Engineering Economy Division	I	II
Engineering Management Division	I	II
Industrial Engineering Division	I	II
Manufacturing Division	I	II
Mechanical Engineering Division	I	V

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PIC II, – Chell Roberts (3 years)

	Current	New
Biomedical Engineering Division	II	I
Design in Engineering Education Division	II	V
Engineering Leadership Development Division	II	III
Engineering Technology Division	II	V
Environmental Engineering Division	II	IV
Materials Division	II	I
Military and Veterans Division	II	IV
Multidisciplinary Engineering Division	II	V
Ocean and Marine Division	II	V
Software Engineering Division	II	III
Systems Engineering Division	II	II

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PIC III, – John Estell (3 years)	Current	New
Community Engagement Division	III	I
Computing and Information Technology Division	III	III
Energy Conversion and Conservation Division	III	III
Engineering and Public Policy Division	III	I
Engineering Design Graphics Division	III	V
Engineering Physics and Physics Division	III	III
First-Year Programs Division	III	IV
Instrumentation Division	III	III
Liberal Education/Engineering & Society Division	III	I
Mathematics Division	III	III
Mechanics Division	III	V
Technological and Engineering Literacy/Philosophy of Engineering Division	III	I
Two-Year College Division	III	IV

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PIC IV, – Beth Holloway (2 years)	Current	New
Computers in Education Division	IV	III
Educational Research and Methods Division	IV	II
Engineering Ethics Division	IV	I
Engineering Libraries Division	IV	I
Entrepreneurship & Engineering Innovation Division	IV	III
Experimentation and Laboratory-Oriented Studies Division	IV	III
Faculty Development Constituent Committee Division	IV	II
Graduate Studies Division	IV	II
International Division	IV	IV
Minorities in Engineering Division	IV	IV
New Engineering Educators Division	IV	II
Pre-College Engineering Education Division	IV	IV
Student Division	IV	II
Women in Engineering Division	IV	IV

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PIC V, – Maureen Baric (2 years)	Current	New
College Industry Partnerships Division	V	V
Continuing Professional Development Division	V	V
Cooperative and Experiential Education Division	V	V



PIC I, – Christi Luks (2 years)	Current	New
Biological and Agricultural Engineering Division	I	I
Biomedical Engineering Division	II	I
Chemical Engineering Division	I	I
Community Engagement Division	III	I
Engineering and Public Policy Division	III	I
Engineering Ethics Division	IV	I
Engineering Libraries Division	IV	I
Liberal Education/Engineering & Society Division	III	I
Materials Division	II	I
Technological and Engineering Literacy/Philosophy of Engineering Division	III	I



PIC II, – Chell Roberts (3 years)	Current	New
Educational Research and Methods Division	IV	II
Engineering Economy Division	I	II
Engineering Management Division	I	II
Faculty Development Constituent Committee Division	IV	II
Graduate Studies Division	IV	II
Industrial Engineering Division	I	II
Manufacturing Division	I	II
New Engineering Educators Division	IV	II
Student Division	IV	II
Systems Engineering Division	II	II



PIC III, – John Estell (3 years)	Current	New
Computers in Education Division	IV	III
Computing and Information Technology Division	III	III
Electrical and Computer Division	I	III
Energy Conversion and Conservation Division	III	III
Engineering Leadership Development Division	II	III
Engineering Physics and Physics Division	III	III
Entrepreneurship & Engineering Innovation Division	IV	III
Experimentation and Laboratory-Oriented Studies Division	IV	III
Instrumentation Division	III	III
Mathematics Division	III	III
Software Engineering Division	II	III



PIC IV, – Beth Holloway (2 years)	Current	New
Architectural Engineering Division	I	IV
Civil Engineering Division	I	IV
Construction Engineering Division	I	IV
Environmental Engineering Division	II	IV
First-Year Programs Division	III	IV
International Division	IV	IV
Military and Veterans Division	II	IV
Minorities in Engineering Division	IV	IV
Pre-College Engineering Education Division	IV	IV
Two-Year College Division	III	IV
Women in Engineering Division	IV	IV



PIC V, – Maureen Baric (2 years)	Current	New
Aerospace Division	I	V
College Industry Partnerships Division	V	V
Continuing Professional Development Division	V	V
Cooperative and Experiential Education Division	V	V
Design in Engineering Education Division	II	V
Engineering Design Graphics Division	III	V
Engineering Technology Division	II	V
Mechanical Engineering Division	I	V
Mechanics Division	III	V
Multidisciplinary Engineering Division	II	V
Ocean and Marine Division	II	V



Back to the All PIC By-Laws – Approval Process

- A copy of the temporary All PIC By-Laws will be sent to the current Division Leadership and the new Division Leadership once the leadership change documents are submitted to ASEE HQ (mid-July). See the email from Tim Manicom (t.manicom@asee.org) for details on submission of this information.
- Unlike the past, all PICs will now operate under one common set of by-laws (i.e., the All PIC By-Laws).
- The approval process:
 - makes use of the PIC Council of each PIC. A PIC Council is comprised of the PIC Chair and the Division Chairs within the PIC; and
 - requires a 2/3 majority vote (of those voting) to approve the by-laws.
- Once each PIC Council is formed (mid-July), the VP of the PICs will call for an All PICs Council meeting in August to discuss/seek input on the All PIC By-Laws. This will be followed with a vote tentatively set for September.

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Updates from the Board

- Membership (as of Q2):
 - Institutional (Academic): -0.7%
 - Institutional (non-Academic): -4.08%
 - Individual: -3%
- Financial Status:
 - We are expecting an unfavorable variance of \$267K from the FY20 budget, principally resulting from a \$733K shortfall from the Annual Conference income.
 - ASEE did receive a PPP loan from the government. It is unclear at this time if the loan will need to be repaid or if it will be converted into a grant. Thus far, the PPP funds have been used to cover staff salaries and rent. To date, ASEE has not had to furlough any staff.
 - The Board is particularly concerned that Institutional Memberships (both Academic and non-Academic) will be significantly down this coming fiscal year.

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Updates from the Board continued

- By-Law Policy Change:
 - All field units are now REQUIRED to have a Diversity, Equity & Inclusion (DEI) statement in their by-laws.
 - Field units that do not currently have a DEI statement in their by-laws are required to have said statement included and approved by the BoD no later than the end of the Annual Conference 2021.
- The new All PIC By-laws will require Division By-Laws to be updated every five (5) years.

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Updates from the Board continued

- BASS Accounts:
 - The Finance Committee has requested that each Division to prepare a statement regarding the BASS account funds associated with operations (i.e., basically how you are budgeting your BASS account funds for this next year).
 - Please remember that BASS account funds are for the benefit of the division, and their use should be communicated to the membership. Justification for any balances carried forward should also be given.
 - A template document will be sent to the Division leaders.
 - The 30% charge to BASS account income continues to approximately cover the costs associated with managing these funds, so the charge will continue as is.

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Updates from the Board continued

- IT Update:
 - The replacement for Monolith is underway:
 - July 2020 is the scheduled release of ASEE Hub, which supports membership communications.
 - July 2021 is the scheduled release of the AMS implementation and CMS web platform release (i.e., prior to the start of the 2022 Annual Conference paper submission process).
 - The current system will be operated concurrent with the release of the new systems to support on going conferences.
 - The new system will be a “software for service” system to provide for continues enhancements in the system over time.



Updates from the Board continued

- Both JEE and AEE will be publishing special issues that deal specifically with COVID19 and its impact on education:
 - JEE – Fall 2020
 - AEE – some time 2021





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Sign-in form: <https://forms.gle/Kcz9mE46kkhPCVs98>

Division Chair's Report: AJ Hamlin

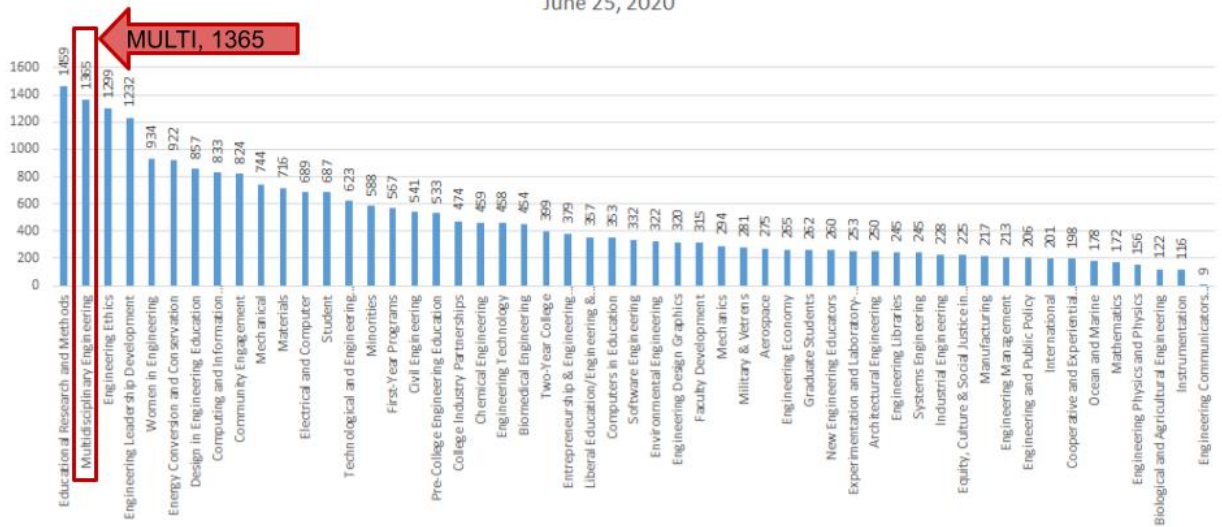
1. MULTI Bylaws
 - a. Approved by division June 2019
 - b. Approval by board is needed
2. Division Membership - 1365
 - a. Second largest division, behind ERM

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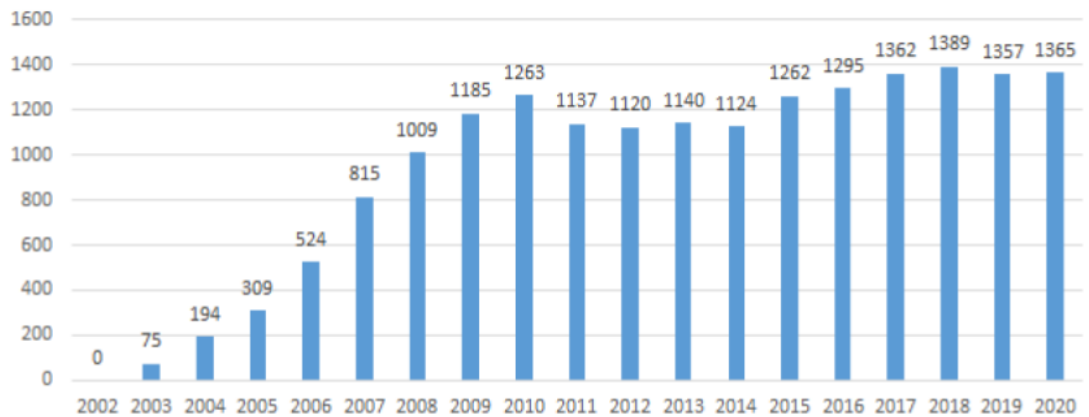
ASEE Division Membership Counts from ASEE Web Directory
June 25, 2020



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MULTI Division Membership Count



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Program Chair's Report: Cynthia Barnicki



American Society for Engineering Education MULTIDISCIPLINARY ENGINEERING DIVISION

In recognition of outstanding excellence in a technical paper
at the 2020 ASEE Annual Virtual Conference

BEST PAPER

Award

Practical Skills for Students in
Mechatronics and Robotics Education

Dr. Carlotta A. Berry, Prof. Michael A. Gennert,
and Dr. Rebecca Marie Reck



AJ Hamlin

AJ Hamlin, 2019-2021 ASEE MULTI Chair
June 23, 2020



Sign-in form: <https://forms.gle/Kcz9mE46kkhPCVs98>

Treasurer's Report: Lynn Albers

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Commission on Diversity, Equity, and Inclusion: Jean Bossart

In April 2020, the ASEE Committee on Diversity, Equity & Inclusion (CDEI) was changed to the ASEE **Commission** on Diversity Equity & Inclusion (CDEI). The change reflects the increase in importance of the work being done, the objectives remain the same:

- 1) Increase visibility and discussion of DEI issues;
- 2) Develop guidance to foster inclusive environments in which all engineers thrive;
- 3) Facilitate and encourage adaptation of strategies to promote the empowerment of all.

Link to CDEI meeting slides: https://tinyurl.com/CDEI_2020_BusMtg

Upcoming events: August 12th Virtual Workshop Series - Tips and Guidelines for DEI Paper Award;
Encourage nominations for the new Constituent Award

Welcome Victoria Bill, new MULTI CDEI representative
Thank you MULTI for your support of DEI over the past 2 years

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Sign-in form: <https://forms.gle/Kcz9mE46kkhPCVs98>

P-12 Representative Committee: Duncan Davis



Sign-in form: <https://forms.gle/Kcz9mE46kkhPCVs98>

Classroom Grants for Engineering Education

- Scholarships for Professional Development for P12 teacher. Need support from Colleagues in P12 (\$500 for Single or \$800 for team)
- Teach in a public, private, or charter school for the 2020-2021 academic year;
- Teach at least one of the following grade(s) pre-kindergarten, kindergarten, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, or 12; and
- Work or otherwise be affiliated with a member of the PCEE Division of ASEE.
- Applications are due by July 1, 2020

<http://precollege.asee.org/grants/>



Sign-in form: <https://forms.gle/Kcz9mE46kkhPCVs98>

Engineering Teacher Professional Development Endorsement (ETPDE)

- Endorse a program for Professional Development.
- Signal boost to the program and assure quality
- In 1-2 paragraphs, describe the need that the program is designed to meet and the unique value that the program brings to addressing this need. Describe the target audience, how are they related to the statement of need, and the degree to which the program is reaching this target audience.

<https://etpde.asee.org/application-process/application-components/>



Sign-in form: <https://forms.gle/Kcz9mE46kkhPCVs98>

ASEE Virtual Summer Camps

- Who: K-8 (Virtual) - students capped a 6-8 per camp
- Date: June 15 - July 31

Offerings (Signup like you register for an ASEE conference):

- Read a Book, Solve a Problem: Literacy-Inspired Creations for Young Engineers (K-1)
- Let's Fly... Into Engineering (2, 3, 4)
- Creative Engineering (2, 3, 4, 5)
- Energy Camp (3, 4, 5)
- Project Aqua - Engineering for Water Fun (1,2,3, 4, 5)
- Tinkercad Taster (4, 5, 6, 7, 8)
- Computation Thinking-Genetics Week-DNA (4, 5, 6, 7, 8)

<https://sites.asee.org/p-12committee/news/>

<https://sites.asee.org/p-12committee/wp-content/uploads/sites/4/2020/06/ASEE-P12-Summer-Camps-2020-1.pdf>



Sign-in form: <https://forms.gle/Kcz9mE46kkhPCVs98>

Other Business

- Future directions
 - Develop opportunities for more involvement
 - Social Committee - plan social at annual conference
 - Workshop/Panel Committee - identify and solicit speakers for workshops and invited panels
 - Work to get representation from all multidisciplinary programs
 - Ideas from social
 - Increase membership
 - Influence program criteria for general engineering programs
 - Develop LinkedIn/site/etc.
 - Create a multidisciplinary engineering journal
 - Develop a snopes.com website to validate journal requests
 - Add an at-large position to the executive board
 - Other? Google Jamboard:
<https://jamboard.google.com/d/1nXzb9HGdG5XhVUdC61THorHYXDUGMtSRI6H7uY-XDbA/edit?usp=sharing>

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Appendix B - Program Chair Report

2020 ASEE Annual Conference & Exposition

June 22-26, 2020

Multidisciplinary Engineering Division

Program Chair's Report

Submitted by Cindy Barnicki
Milwaukee School of Engineering
June 26, 2020

The program for the Multidisciplinary Engineering Division (MULTI) at the 2020 ASEE Annual Conference and Exposition (Virtual) comprises eight technical sessions, a Tuesday evening social, and a Business Meeting. MULTI is also a co-sponsor for the following sessions:

- Panel of Invited Speakers (W448: "The Many Facets of Cyber-and-Systems security Engineering Education" Systems Engineering Division lead)
- Distinguished Lecture (W411B: "Continued Conversation-Social Disruption of Emerging Technologies & Implications for Engineering Education," Cooperative and Experiential Education Division lead)

In response to the call for papers, MULTI received 68 abstracts directly (up from 61 for ASEE 2019 and 57 for ASEE 2018). These 68 abstracts were managed as follows:

Status of Abstract/Paper	Count
Abstracts submitted/transferred in	68
Abstracts not accepted	4
Abstracts withdrawn before review	1
Abstracts transferred out based on reviewers' recommendations	1
Abstract converted to panel request	0
Abstracts accepted/draft papers expected	62
Draft papers not submitted (past deadline but not withdrawn)	6
Draft papers withdrawn by author (i.e., no draft submitted)	10
Draft papers submitted and reviewed	46
Draft papers not accepted	3
Draft papers withdrawn after reviews	4
Draft papers transferred in after review	0
Draft papers approved on draft (no rewrites necessary)	23
Draft papers moved to rewrites	20
Rewrites not accepted	2
Rewrites not submitted (past deadline but not withdrawn)	1
Accepted papers not finalized	2
Final papers accepted for MULTI technical sessions	34
Final papers accepted for MULTI poster session (no poster session)	0
Total final papers accepted for poster and technical sessions	34

Average number of abstracts submitted to MULTI at past conferences	54	Number of abstracts submitted/transferred in for this year's conference	68
Average yield percentage (final papers to abstracts submitted)	60.44%	Yield percentage for this conference (final papers to abstracts submitted)	50%
Average number of final papers	32.6	Final papers for this conference	34
Average number of technical sessions	7.43	Number of 2019 technical sessions	8

2020 MULTI Best Paper

"Practical Skills for Students in Mechatronics and Robotics Education" by Dr. Carlotta A. Berry, Rose-Hulman Institute of Technology; Prof. Michael A. Gennert, Worcester Polytechnic Institute; and Dr. Rebecca Marie Reck, Kettering University.

2020 MULTI Technical Sessions:

M341· Multidisciplinary Endeavors: Engineering and Liberal Arts

Monday June 22, 2020 11:00 AM to 11:20 AM (EDT)

T241· Multidisciplinary Service and Outreach Projects

Tuesday June 23, 2020 10:00 AM to 10:20 AM (EDT)

T341· Mechatronics and Robotics I

Tuesday June 23, 2020 11:00 AM to 11:20 AM (EDT)

W341· Multidisciplinary Engineering Experiences

Wednesday June 24, 2020 11:00 AM to 11:20 AM (EDT)

R341A· Mechatronics and Robotics I

Thursday June 25, 2020 11:00 AM to 11:20 AM (EDT),

R341B· Multidisciplinary Curriculum and Course Development

Thursday June 25, 2020 11:40 AM to noon (EDT)

F341A· Multidisciplinary Engineering Experiences

Friday June 26, 2020 10:40 AM to 11:00 AM (EDT)

F341B · Innovations for Multidisciplinary Programs

Friday June 26, 2020 11:00 AM to 11:20 AM (EDT)

20120 MULTI Co-Sponsored Sessions:

*W448· **Panel of Invited Speakers** – The Many Facets of Cyber-and-Systems security Engineering Education*

Wed. June 24, 2020 1:00 PM to 1:30 PM (EDT)

*W411B ·**Distinguished Lecture:** Continued Conversation - Social Disruption of Emerging Technologies & Implications for Engineering Education*

Wed. June 24, 2020 2:00 PM to 2:30 PM (EDT)

2020 MULTI Social:

T741·Multidisciplinary Engineering Division Social

Tuesday June 23, 2020 7:00 PM to 9:00 PM (EDT)

2020 MULTI Business Meeting:

F541·Multidisciplinary Engineering Division Business Meeting

Friday, June 26, 2020 3:00 PM to 4:00 (EDT)

Appendix C - Treasurer's Report

ASEE Multidisciplinary Engineering Division

Treasurer's Report

June 26, 2020

THIS YEAR (6/17/2019-6/26/2020)

Account Type	BASS 249	Operating 349
Balance as of last meeting 6/17/2019	\$338.16	\$1336.00
<u>Operating Account Debits:</u> 7/15/2019: Deposit for restaurant 7/16/2019: Food and Beverage for 2019 Division Social/Meeting 8/27/2019: Transfer to CEED – Co- Expense-Distinguished Lecture		-\$100.00 -\$608.56 -\$340.42
<u>BASS Revenues: (through 9/30/2019)</u> 6/30/2019: 2019 Annual Conf. Session Ticket Sale 6/30/2019: State of Nebraska-PMT for research participation in CS Project 9/30/2019: ASEE Administrative Fee	\$180.00 10.00 -\$3.00	
Interest: 10/1/2018-09/30/2019	\$3.23	N/A

Ending fiscal year balance on 09/30/2019	\$528.39	\$287.44
Carry forward to new fiscal year on 10/01/2019*	\$528.39	\$0.00
ASEE Membership Allocation Funds at \$1.00 per member on 10/01/2019**	\$1244.00	\$0.00
Starting fiscal year balance on 10/01/2019**	\$1772.39	\$0.00
Interest: 10/1/2019-03/31/2020 (FY2020 Q1+Q2) ***	\$6.59	N/A
ASEE administrative fee: (10/1/2019-03/31/2020)	\$0.00	N/A
<u>Revenues: (10/1/2019 - 3/31/2020)</u>		N/A
None	\$0.00	
Balance as of 06/26/2020	\$1778.98	\$0.00

Notes: * \$287.44 left in Operating Account on 09/30/2019 did not transfer to BASS account

** Operating Account ceased to exist starting 10/1/2019.

*** 12/31/2019 FY2020 Q1 BASS Interest Allocation Deposit = \$3.63

03/31/2020 FY2020 Q2 BASS Interest Allocation = \$2.96

ASEE Multidisciplinary Engineering Division

Treasurer's Report

June 17, 2019

LAST YEAR (6/26/2018-6/17/2019)

Account Type	BASS 249	Operating 349
Balance as of last meeting, 06/26/2018	\$275.40	\$1341.00
<u>Operating Account Debits:</u> 6/30/2018: Session W211 Distinguished Lecture (1/7 th of \$550 honorarium and 1/7 th of \$125 conference registration fee) 7/6/2018: Appetizers, for 2018 Division Social 7/6/2018: Beverages for 2018 Division Social 7/6/2018: Supplies for Best Paper Award(s) and Division mixer		 -\$96.44 -\$59.15 -\$140.42 -\$54.30

<u>BASS Revenues: (through 9/30/2018)</u> 6/30/2018: Ticket sales (M741: 11 @ \$10 advance, 0@ \$20 \$20 on site) to the 2018 social with \$21.00 14% of \$150 (AV and room) for co-sponsor of session W211 Distinguished Lecture 9/30/2018: ASEE Administrative Fee (30% of BASS revenue)	\$89.00 -\$26.70	
Interest: 10/1/2017-09/30/2018	\$.46	N/A
Ending fiscal year balance on 09/30/2018	\$338.16	\$990.69
Carry forward to new fiscal year on 10/01/2018	\$338.16	\$0.00
ASEE allocation at \$1.00 per member on 10/01/2018	N/A	\$1336.00
Starting fiscal year balance on 10/01/2018	\$338.16	\$1336.00
Interest: 10/1/2018-3/31/2019	\$1.43	N/A
BASS account administrative fee (12/31/2018)	-\$3.00	
<u>BASS Revenues: (10/1/2018 - 3/31/2019)</u> Participation in Research Project (10/22/2018) Ticket Sales for 2019 Social (temporary)	\$10.00 \$30.00	
Balance as of 06/17/2019	\$376.59*	\$1336.00

Notes: All account balances are consistent with ASEE records