A MESSAGE FROM THE DIVISION CHAIR

Kris Jaeger-Helton, Northeastern University

Welcome members and newcomers to the New Engineering Educators Division,

We are excited for another memorable year at our ASEE conference in Columbus! We hope you will be able to join us and/or follow our activities so that you can benefit in person or remotely.

In the New Engineering Educators Division (NEE), our focus is on educators – prospective, current, and past—in all majors and interests, and at all levels of experience and expertise. This is how we partner so well with other divisions and their memberships. Our goal aligns with those of ASEE—an overarching aim to enhance, improve, innovate and inspire in engineering education. This necessarily involves those who provide their contributions and those who receive and benefit from them. Even better, we take on both of those roles in our continuous improvement path, through presenting, attending and networking together.

There are so many reasons to align with NEE! First, new or aspiring educators clearly find value in the experience and research of others. Whether it is innovation in the classroom, efficient methods of presenting, grading or engaging students, or full experimental research on an aspect of engineering education, you are sure to find applicable and usable material. Likewise, if you have some experience, you are able to contribute and learn in our division as well as connect with others who are as dedicated as you are.

In NEE we also have workshops, seminars, panels and sessions on building your career—from those currently in your shoes and those who have previously taken this journey. Finally, for those of you who have been down this path already and may be in leadership in your university or college, there is plenty for you. Not only can you contribute to the work of others with your experience, you’ll be surprised to discover how much you can learn about the current educational culture and the challenges facing your faculty and students nowadays.

Read on to learn more from our Program Director on what is in store in NEE at ASEE 2017!
Greetings! I hope that all is well as you prepare for the end of the academic year. We have an exciting program planned for the 2017 ASEE Annual Conference in Columbus and hope that you will be able to attend.

The New Engineering Educators division is one with members from various backgrounds. Although many NEE members are new faculty members having recently graduated from PhD programs, there are many others who have worked in industry or government for several years before entering academia. Similarly, there are some seasoned faculty members who have great advice to give to new engineering faculty and have maintained ties with the division even though they can no longer claim to be “new” engineering educators. As mentioned in the call for papers, we actively seek papers that give advice on writing technical papers, obtaining grant funding, mentoring new faculty members, introducing novel classroom techniques and integrating technology in the classroom, and preparing for tenure and promotion, among many others.

This year we have many interesting workshops, panels, and technical sessions. Starting on Sunday, June 25, we have two morning technical sessions: Tips and Tricks for Actively Engaging Students at 8:00 AM and Technology for Faculty Development and Classroom Management at 9:45 AM. New members and first-time attendees are encouraged to attend the Greet the Stars! luncheon starting at 11:30 AM in the Regency Ballroom at the Hyatt Regency. At 4:00 PM in the Regency Ballroom will be the ASEE Division Mixer with free music, food, and drinks and an opportunity to network with members of various ASEE divisions.

On Monday, following the morning plenary and Focus on Exhibits, at 11:30 AM there will be a panel session: You Can Be a Star Peer Reviewer! presented by editors of the Journal of Engineering Education and ASEE’s Advances in Engineering Education. In the afternoon will be two technical sessions: Developing New Engineering Educators at 1:30 PM and Encouraging Students to Think Critically at 3:15 PM. Also at 3:15 is the 2017 Interdivisional Town Hall Meeting: The Culture of Teaching, a panel session aimed at enhancing student engagement, transforming engineering mindsets, and attaining other deeper engineering educational objectives.

On Tuesday at 8:00 AM, there will be a panel session entitled What Education Researchers Want You to Know About Teaching, featuring engineering education researchers who will provide advice related to classroom research and best teaching practices. At 1:30 PM there are two panel sessions: Strategies for Success and Sanity for Academic Mothers and The Care and Keeping of Graduate Students, which should be of great interest to academic mothers and graduate student advisors within the division. The final technical session, Tips and Tricks for Assessing Student Performance, will follow at 3:15 PM.

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Not to be missed is the **NEE Awards Dinner and Social Event**, held at Arch City Tavern (http://www.archcitytavern.com/), starting at 7:00 PM. Best paper awards will be presented at this dinner. This is a great event to network with other new engineering educators and identify potential collaborators for future projects.

On **Wednesday** at 8:00 AM, the **NEE Business Meeting** will be held to elect new officers for the 2017/18 academic year as well as to conduct other business related to planning for the 2018 Annual Conference in Salt Lake City. **Breakfast will be provided free of charge.**

In the afternoon will be several workshops, starting at 1:30 PM. In the first two hours will be two workshops: **Making Grades Meaningful – Building a Community of Practitioners and Improve Your Assignments and Handouts Using Document Design Principles.** The former is aimed at introducing and helping to implement a standards-based grading system, whereas the latter seeks to help engineering faculty develop clear documentation for their courses. Running at the same time but lasting until 5:30 PM will be two other workshops: **Exploring Culture and Diagnosing Problems: Approaches to Inquiry for Success as an Emerging Leader**, designed to train new faculty to quickly adapt to their new surroundings and become leaders; and **Building Your Team of Change Champions**, looking at the broad scope of individuals necessary to make changes, whether large or small, in engineering curricula.

As usual, we have a very exciting lineup of technical sessions, panels, and workshops. Please consider attending the conference, even if you don’t have a paper to present. Being a member of NEE offers you a great opportunity to network with other new engineering faculty who may be experiencing many of the same issues that you face on a regular basis.

I look forward to seeing you in Columbus! Best regards,

Jay Wierer

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**CALL FOR OFFICERS – JOIN OUR LEADERSHIP AND PARTNERSHIPS TEAMS!**

New Engineering Educators Division (NEE) is seeking nominations for the positions of **Program Vice-Chair**, **Secretary**, and **Treasurer**, who shall be elected at our Annual Business Meeting at ASEE 2017 in June. The Program Vice-Chair, upon completion of his/her term, shall become the Program Chair. The Program Chair, upon completion of his/her term, shall become the Division Chair. Please consider nominating someone –or yourself– for these leadership positions. If you have questions, feel free to contact anyone currently on the NEE Leadership Team.

Nominations can also be made at the NEE Business Meeting on Wednesday, 28 June 2017. At that time, a vote will be taken to elect our new board members. In addition, our Leadership Team is looking to partner creative and inspired individuals with our existing Newsletter Editor(s), Membership Chair, and Social Presence Director, which will also be reviewed at our meeting!

**NEE Business Meeting on Wednesday, 28 June 2017, 8 AM,**
**Grant Room, Hyatt Regency Columbus**
The immediate **Past Division Chair** (1) assumes the responsibilities of vacated offices that exist, (2) chairs the awards committee, and (3) provides council to the Division Chair.

The **Division Chair** (1) has administrative responsibility for all function of the Division in accordance with Bylaws, (2) provides council to the program chair, and (3) communicates with the PIC IV Chair.

The **Program Chair** (1) plans and organizes all sessions sponsored by the Division at the Annual Conference, and (2) runs the Annual Business Meeting of the Division.

The **Program Vice-Chair** (1) assists the Program Chair in planning and organizing sessions at the Annual Conference, (2) assumes the responsibilities of the Program Chair upon vacancy.

The **Treasurer** (1) handles all financial dealings of the Division, and (2) provides a report on all Division accounts during the Annual Business Meeting.

The **Secretary** (1) takes minutes of the Annual Business Meeting and provides these electronically to the Executive Board, and (2) coordinates any advertisement required.

The **Membership Chair** identifies strategies to improve membership in the division

The **Newsletter Editor** provides an annual newsletter to the division.

The **Social Presence Director**: oversees management of any websites, and other forms of social media related to NEE Division members and activities, particularly within ASEE.
**U142·TIPS AND TRICKS FOR ACTIVELY ENGAGING STUDENTS**

**SUN. JUNE 25, 2017 8:00 AM TO 9:30 AM**  
**ROOM B244-245, COLUMBUS CONVENTION CENTER**

Actively engaging students can be a very challenging task for a new engineering educator. The papers in this session include describing a workshop for effectively engaging students in a STEM classroom, using simple active learning techniques in electrical and computer engineering courses, and developing faculty learning communities for encouraging innovative teaching.

**U242·TECHNOLOGY FOR FACULTY DEVELOPMENT AND CLASSROOM MANAGEMENT**

**SUN. JUNE 25, 2017 9:45 AM TO 11:15 AM**  
**ROOM B244-245, COLUMBUS CONVENTION CENTER**

This session features papers by new engineering educators who are using technology to assist in their preparation for tenure and promotion as well as promoting academic honesty, administering entire courses electronically, and using video responses in a flipped classroom.

**U375A·ACTION ON DIVERSITY - SAFE ZONE ALLY TRAINING (LEVEL 1)**

**SUN. JUNE 25, 2017 11:30 AM TO 1:00 PM**  
**DELWARE B, HYATT REGENCY COLUMBUS**

Safe Zone Ally Training is a two-part interactive workshop for students, faculty, and the professional community, during which participants will build the knowledge and skills needed to create a more inclusive and affirming environment for LGBTQIA individuals in engineering. In Level 1, participants will focus on understanding LGBTQIA concepts and identity development, creating an inclusive environment, and becoming an ally.
M342·YOU CAN BE A STAR PEER REVIEWER!
MON. JUNE 26, 2017 11:30 AM TO 1:00 PM
ROOM A111, COLUMBUS CONVENTION CENTER
Dr. Michael C. Loui, Dr. Larry J. Shuman
The presenters will open the session by discussing three perspectives of the review process: the authors’ expectations of a fair and timely review; the editor’s expectations of a comprehensive review that offers valuable recommendations; and reviewer’s responsibilities. After their opening remarks, the presenters initiate a dialogue with the audience, both eliciting questions and promoting discussion among attendees and presenters. Although they will refer to the policies and practices of their own journals, their advice should apply more generally to other academic journals.

M442·DEVELOPING NEW ENGINEERING EDUCATORS
MON. JUNE 26, 2017 1:30 PM TO 3:00 PM
ROOM A223, COLUMBUS CONVENTION CENTER
The papers in this session focus on the development of new engineering faculty. Topics include transitioning from industry to academia, best practices for new faculty orientation, understanding the various skill sets and roles of faculty members, time management and well-being, and developing a virtual peer mentoring community.

M445·P-12 STEM EDUCATION: LEARNING THROUGH GUIDED DISCOVERY
MON. JUNE 26, 2017 1:30 PM TO 3:00 PM
ROOM A112, COLUMBUS CONVENTION CENTER
This session provides P-12 STEM engineering/physics education and covers the following:
- The current state of P-12 STEM engineering/physics programs
- Physics and engineering activities for P-12 STEM
- Increase talent pool by improving P–12 engineering/physics education to enter college and graduate with engineering/physics degrees
- Strengthen the skills of teachers through additional training in engineering/physics-related technology

M534·2017 INTERDIVISIONAL TOWN HALL MEETING: THE CULTURE OF TEACHING
MON. JUNE 26, 2017 3:15 PM TO 4:45 PM
FRANKLIN AB, HYATT REGENCY COLUMBUS
Dr. Alan Cheville, Jenn Rossmann, Dr. Darryl N Williams, Dr. Teodora Rutar Shuman, Prof. Joe Tranquillo
What is the culture of engineering instruction on our campuses and how can we change it to enhance student engagement, transform engineering mindsets, and attain the other, deeper objectives that we hold as engineering educators? For the 2017 ASEE Interdivisional Town Hall meeting, we propose to convene a multi-phase event built around this question.

M542·ENCOURAGING STUDENTS TO THINK CRITICALLY
MON. JUNE 26, 2017 3:15 PM TO 4:45 PM
ROOM C170, COLUMBUS CONVENTION CENTER
Critical thinking is a skill that engineering educators want their students to possess but often find difficult to properly motivate on a regular basis. The papers in this session include providing formative feedback via responsive teaching, engaging in reflection activities in the engineering classroom, and developing signature assignments in engineering design courses.

M575·ACTION ON DIVERSITY - SAFE ZONE ALLY TRAINING (LEVEL 2)
MON. JUNE 26, 2017 3:15 PM TO 4:45 PM
DELAWARE B, HYATT REGENCY COLUMBUS
Safe Zone Ally Training is a two-part interactive workshop for students, faculty, and the professional community, during which participants will build the knowledge and skills needed to create a more inclusive and affirming environment for LGBTQIA individuals in engineering. In Level 1, participants will focus on understanding LGBTQIA concepts and identity development, creating an inclusive. In level 2, participants will discuss aspects of engineering culture that act as barriers to LGBTQIA equality, explore heterosexual and cisgender privilege, and learn to recognize bias and disrupt discrimination.
T142·Panel: What Education Researchers Want You to Know about Teaching and Classroom Research
Tue. June 27, 2017 8:00 AM to 9:30 AM
Room A111, Columbus Convention Center
Dr. Michael C. Loui, Dr. Stacy S Klein-Gardner
The purpose of this panel is to offer an opportunity for engineering faculty to hear education researchers discuss important problems, perspectives, and solutions in teaching and conducting classroom research. Since all the panelists have engineering degrees, they are familiar with the engineering subject matter, students, culture, and teaching constraints of the audience. It differs from paper sessions in that the panelists are not limited to discussing new research, but can talk about a variety of issues and best practices known in the education community. It also offers a chance for members of the audience to ask open-ended questions of these education specialists regarding problems they have encountered.

T428B·Panel: The Care and Keeping of Graduate Students
Tue. June 27, 2017 1:30 PM to 3:00 PM
Room A222, Columbus Convention Center
Dr. Catherine G.P. Berdanier, Dr. Katie Luchini-Colbry
This session will offer theory-based best practices for research group leadership and management. As a result of this session, participants will be able to approach the “care and keeping” of their graduate students from a literature-based and scholarly perspective, noting elements of graduate socialization that affect student development, success, and persistence.

T442·Panel: Strategies for Success and Sanity for Academic Mothers
Tue. June 27, 2017 1:30 PM to 3:00 PM
Room A211, Columbus Convention Center
Dr. Kaitlin Mallouk, Dr. Rachel Louis Kajfez, Dr. Cheryl A Bodnar, Dr. Mary E. Besterfield-Sacre, Dr. Mahnas Jean Mohammadi-Aragh
Raising children is one of the most challenging and opportunity-filled experiences most people will take on in their lives. Raising children as a member of the academy brings an additional layer of complexity. This panel will present challenges and opportunities encountered by the panelists while raising children and trying to succeed in academia. The panelists will also provide concrete, achievable strategies that have worked for them to overcome those hurdles and how they have leveraged the opportunities available to them.

T542·Tips and Tricks for Assessing Student Performance
Tue. June 27, 2017 3:15 PM to 4:45 PM
Room C170, Columbus Convention Center
Assessing student performance can be a challenging task for a new engineering educator. The papers in this session include replacing homework with announced quizzes, developing standards-based rubrics to improve grader consistency, tips for introducing self-assessment into engineering courses, and teaching students how to provide meaningful peer feedback.

T742·Nee Awards/Networking/Social Event
Tue. June 27, 2017 7:00 PM to 9:00 PM
Arch City Tavern: 862 North High Street, Columbus, OH 43215
(614) 725-5620 HTTP://WWW.ARCHCITYTAVERN.COM/
W142 · NEE BUSINESS MEETING

WED, JUNE 28, 2017 8:00 AM TO 9:30 AM
GRANT, HYATT REGENCY COLUMBUS

NEE Business Meeting - Breakfast is provided to all attendees. Please join us as we decide on the future and direction of our New Engineering Educators.

W175A · ACTION ON DIVERSITY - SAFE ZONE ALLY TRAINING (LEVEL 1)

WED, JUNE 28, 2017 8:00 AM TO 9:30 AM
DELAWARE B, HYATT REGENCY COLUMBUS

Safe Zone Ally Training is a two-part interactive workshop for students, faculty, and the professional community, during which participants will build the knowledge and skills needed to create a more inclusive and affirming environment for LGBTQIA individuals in engineering. In Level 1, participants will focus on understanding LGBTQIA concepts and identity development, creating an inclusive environment, and becoming an ally.

W442A · WEDNESDAY WORKSHOP: MAKING GRADES MEANINGFUL - BUILDING A COMMUNITY OF PRACTITIONERS

WED, JUNE 28, 2017 1:30 PM TO 3:30 PM
ROOM A211, COLUMBUS CONVENTION CENTER

Dr. Adam R Carberry, Prof. Heidi A. Diefes-Dux, Dr. Sara A. Atwood, Dr. Matthew Siniawski

Assessment of student achievement using a grading system is a major task required of engineering educators. Most higher education institutions use a traditional, summative score-based grading system that relies on assigning an end-of-semester letter grade representative of each student's achievement in the course. Most educators default to assigning student grades by tabulating scores for multiple assignments, summing assignment scores, and determining a final course grade based on a predetermined scale. An alternative approach is to directly measure the quality of students' proficiency toward well-defined course objectives through a learning outcomes-based approach, heretofore referred to as standards-based grading (SBG). This workshop will allow 20 faculty participants currently utilizing SBG during the 2016-2017 academic year to share their experiences with one another and introduce other faculty to SBG.

W442B · WEDNESDAY WORKSHOP: BUILDING YOUR TEAM OF CHANGE CHAMPIONS

WED, JUNE 28, 2017 1:30 PM TO 5:30 PM
ROOM A212, COLUMBUS CONVENTION CENTER

Dr. Jennifer Karlin, Dr. Dan Ewert, Mr. Ronald R Ulseth, Prof. Rebecca A Bates

While many efforts have been made to develop both technical and professional skills in engineering graduates, there has been little change in the pedagogy of most engineering education institutions in the U.S., despite the evolution of engineering education in many countries around the world. This interactive workshop uses the metaphor of a baseball team to illustrate the variety of people/roles involved in making improvements happen, as well as the ecosystem in which these changes occur. When making smaller-scale changes, the members may be more loosely structured like a sandlot team, though core roles still need to be fulfilled. Larger-scale changes may require visible change champions with different specialties, such as managing and coaching staff, and a team maintaining the stadium. This workshop looks at the broad scope of individuals necessary to field a team of change champions and helps participants build their own “roster” and “scouting” processes, whether their current (or envisioned) change is big, small, or somewhere in between. Everyone interested in changing engineering education is welcome. You do not need to have a “big idea” or a team to be part of this workshop.

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W442C· WEDNESDAY WORKSHOP: EXPLORING CULTURE AND DIAGNOSING PROBLEMS: APPROACHES TO INQUIRY FOR SUCCESS AS AN EMERGING LEADER
WED. JUNE 28, 2017 1:30 PM TO 5:30 PM
ROOM A122, COLUMBUS CONVENTION CENTER
Dr. Ella Lee Ingram, Dr. Julia M. William, Dr. Matthew D. Lovell
One of the great benefits of being a newcomer to an organization is seeing things with fresh eyes. One of the great challenges is not knowing the backstory, context, relationships, and previous attempts to fix the obvious problem. Similarly, educators working with new colleagues, stepping into leadership, or transitioning roles experience a similar precarious balance between observing the apparent and knowing that something must explain the situation. This session takes a “cultural curiosity” approach to examining institutional or departmental operations, people, and problems. The ultimate goal of this session is to give participants a model to follow when they experience that familiar feeling of “why in the heck do they do that when the solution is so obvious?” Our workshop materials and approach allow participants to work in their specific institutional and departmental contexts, consistent with research in organizational change that affirms that culture broadly shapes how and why change occurs. From a functional perspective, this workshop will proceed in a highly participatory manner.

W442D· WEDNESDAY WORKSHOP: IMPROVE YOUR ASSIGNMENTS AND HANDOUTS USING DOCUMENT DESIGN PRINCIPLES
WED. JUNE 28, 2017 1:30 PM TO 3:30 PM
ROOM A210, COLUMBUS CONVENTION CENTER
SESSION DESCRIPTION
Dr. Richard A House, Dr. Richard A. Layton P.E., Dr. Jessica Livingston, Dr. Sean Moseley
The workshop will begin with an analysis of audience and genre for the types of document that engineering faculty commonly produce—mainly assignments and lecture handouts. The result of this analysis will establish a set of design principles and guidelines that are easy to implement. A sample document will be modified to demonstrate the improvements made. Participants will bring, in an editable format, documents they would like to revise. They will spend time revising these documents with constructive feedback from the workshop leaders in one-on-one and small group discussions. The workshop will close with participants developing their own templates to save time when writing future assignments and lecture handouts, based on the kind of documents that they commonly produce.

W475· ACTION ON DIVERSITY - SAFE ZONE DEEP DIVE: SUPPORTING TRANSGENDER STUDENTS AND COLLEAGUES
WED. JUNE 28, 2017 1:30 PM TO 3:00 PM
DELAWARE B, HYATT REGENCY COLUMBUS
Safe Zone Ally Training is a two-part interactive workshop for students, faculty, and the professional community, during which participants will build the knowledge and skills needed to create a more inclusive and affirming environment for LGBTQIA individuals in engineering. Our Deep Dive LGBTQ Inclusion workshop will focus on supporting transgender students and colleagues.

W575· ACTION ON DIVERSITY - SAFE ZONE ALLY TRAINING (LEVEL 2)
WED. JUNE 28, 2017 3:15 PM TO 4:45 PM
DELAWARE B, HYATT REGENCY COLUMBUS
Safe Zone Ally Training is a two-part interactive workshop for students, faculty, and the professional community, during which participants will build the knowledge and skills needed to create a more inclusive and affirming environment for LGBTQIA individuals in engineering. In level 2, participants will discuss aspects of engineering culture that act as barriers to LGBTQIA equality, explore heterosexual and cisgender privilege, and learn to recognize bias and disrupt discrimination.
JOB POSTINGS THAT MAY BE OF INTEREST TO YOU OR SOMEONE YOU KNOW

Northeastern University Assistant/Associate Teaching Professor Position
Looking for a dynamic team environment in first-year teaching in Boston? The first-year program at Northeastern University located in Boston, Massachusetts is looking for qualified candidates to fill the position of Assistant/Associate Teaching Professor in the College of Engineering. The main responsibility of this full-time, benefits eligible, non-tenure-track position is teaching first-year engineering students. At Northeastern, first-year students are taught using a cornerstone approach, where the emphasis on design and problem solving using engineering tools and software has been integrated and applied in course themes that are project-based. The first-year faculty work as a team, developing course curriculum and content and we are looking for creative and collaborative individuals who want to share our innovative vision with the engineers of tomorrow.

Link to apply:  http://neu.peopleadmin.com/postings/41968

Duke University ECE Professor of the Practice Position
The Department of Electrical and Computer Engineering (ECE) at Duke University in Durham, NC, invites applications for an open-rank Professor of the Practice (PoP) position. We are seeking an innovative educator with teaching and research experience in electrical and computer engineering. Candidates with expertise in robotics, digital systems, machine learning, or software engineering are particularly encouraged to apply. This non-tenure-track, regular-rank position will serve as a primary instructor of core and elective courses in electrical and computer engineering and possibly other subjects taken by ECE students. PoP positions emphasize teaching excellence as well as complementary scholarship through technical or educational research, external research funding, peer-reviewed conference and journal publications, and/or involvement in engineering education at the national or international level. Candidates must possess an earned doctorate in electrical or computer engineering or a related discipline, and have a demonstrated record of teaching excellence. Candidates with industry experience are encouraged to apply. We will begin reviewing applications June 15, 2017; applications received by August 15, 2017 will receive full consideration. Duke University is an Equal Employment Opportunity/Affirmative Action employer. We welcome applications from women and members of minority groups as well as others who would bring additional dimensions to the university’s research and teaching missions. Applications must be submitted online at:

https://academicjobsonline.org/ajo/jobs/9000

Full advertisement is available at: https://www.asee.org/sales-and-marketing/advertising/classified-advertising/job-postings?direct=2159