

Special points of interest:

- Meet the new CEED board
- CEED award winners
- CEED Conference round-up and pictures
- ASEE national conference preview



Spring Newsbrief

Letter from the CEED Chair: Craig Gunn

What a year it has been! Everyone I converse with seems to follow the same train of thought, "Where has the time gone," to "This just has been a most hectic time!" I think back to those days in a time long ago on a planet light years away when we could still plan a get together on the same day we thought of it, a time when we didn't have calendars because we really didn't have that much to plan for. It was a relaxing time that didn't strain our brains or muscles and our blood pressures hovered around 110 over 65. For the youngsters among us who grew up on schedules and deadlines, there is only the ever present demand to get things done, to make the latest meeting, and the need to be on call at every waking and sleeping moment. For the oldsters we sometimes long for that more relaxed and peaceful time.

Now with that reminiscence back to a time long ago or a reality check to what life is like today, first let me say time is what it is and the work that we do is tied to our existence in this reality. We are now people of action and excitement. The life of every individual embroiled in co-ops, internships, and every form of experiential learning finds that life is not quiet. It is loud and demanding from our students and the employers with whom we work. Our students need employment to document their skills and our employers need our students to carry out the jobs that each industry demands. The Cooperative and Experiential Education Division of the American Society for Engineering Education plays a pivotal role in engineering education. We provide a means by which industry is able to see what our students can really do. Yes, our students have the mental tools to prove their intelligence, but they need the experience that co-ops and internships provide to make them a complete functioning part of the working world. As the school year draws to a close (realizing that it never really stops) please look in a mirror and pat yourself on the back for a job well done. Keep in mind that with all the work that you do in making sure that students have the opportunity to prove themselves that you are the catalyst that gets that job done. Perhaps you are not told enough about the fantastic benefit to the institutions from which you come. Perhaps you leave the building on one of those cold blustery April days wondering if it was all worth the effort. Well, stop wondering! You are the glue that keeps the ship afloat. With all of you doing what you do, our students will show what they can do!

As you think about CEED, why not talk to colleagues and friends who might join us and benefit from being a part of the CEED family. Invite them to look into getting involved, joining us at the annual Conference for Industry and Education Collaboration, or participating in the annual American Society for Engineering Education. There is so much that can be done that every individual should find a comfortable place to fill. Have a wonderful summer and a little time to rest before fall 2018 begins!

Craig Gunn Chair, ASEE CEED gunn@egr.msu.edu



THANK YOU! Sandra English, CEED Past Chair

CEED Board Strategic Plan Goals

Outcome 1: Membership is increased

Outcome 2: Membership is more fully engaged

Outcome 3: Revenue is increased

Outcome 4: Organization is clearly defined

Outcome 5: Standards of operation are documented



Meet the New CEED Board

Craig Gunn
gunn@egr.msu.edu
Michigan State University
Chair Elect

Lisa Massi, Ed.D.

<u>Lisa.Massi@ucf.edu</u>

University of Central Florida

Past Chair
Sandra L. English, J.D., M.P.A.
s.l.english@csuohio.edu

s.l.english@csuohio.edu
Cleveland State University
Treasurer

Jennifer Williams jlw25@iupui.edu

Purdue School of Engineering/Technology,

IUPUI Secretary

Chair

Rob Rogers

rob.rogers@gatech.edu
Georgia Institute of Technology

<u>Archivist</u>

Reginald MacGregor

Reginald.McGregor@rolls-royce.com

Rolls Royce

Industrial Rep.—Co-op

Amy McMullen

<u>Amy_McMullen@LincolnElectric.com</u> Lincoln Electric

Industrial Representative - Experiential Education

Marzell Brown

mlbrown@ra.rockwell.com Rockwell Automation

Academic Rep. Co-op Vickie Kuntz, Ph.D. vkuntz@eng.utoldeo.edu

University of Toledo

Academic Representative Experiential Education

Sandi Brabb

brabb@wsu.edu

Washington State University

Newsbrief Editor

Anita Todd

anita.todd@uc.edu

University of Cincinnati

Research

Bernadette Friedrich

friedric@egr.msu.edu

Michigan State University CIEC Program Chair

Annalise Kellaher

a.kelleher@csuohio.edu Cleveland State University

2018 ASEE CEED Program Chair

Diane LaFreniere

lafrenid@gvsu.edu Grand Valley State

Professional Awards Chair

Maureen Schomaker

maureen.schomaker@uc.edu

University of Cincinnati

Student Awards Chair Sarah Kostanski

s.kostanski@northeastern.edu

Northeastern University

Membership

Maureen Barcic

paub2m@pitt.edu

University of Pittsburgh

Public Relations/Communications

Kyle Liechty

<u>liechtyk@egr.msu.edu</u> Michigan State University



Another Great CIEC Conference, San Antonio, TX Engineering for Engineering Education (E3)

CIEC 2018 was held in San Antonio, TX, along the beautiful Riverwalk. The opening reception was out of this world! Great food and fun with our extraterrestrial theme. The mayor of San Antonio, Ivy R. Taylor opened the conference.

An array of sessions followed, including Industry and best practice round tables, and presentations on preparing students, international experiences, and managing student expectations, among others.

CEED recognized our annual student and professional award recipients at a lovely reception along the Riverwalk.

Thank you Jill Flood, University of Cincinnati, for putting together an outstanding program.

See you in 2019 in New Orleans, Jan 30-Feb 1.



CONGRATULATIONS TO OUR STUDENT AWARD RECIPIENTS

Co-op of the Year -Christopher Gomes, Mississippi State University

Christopher Gomes is a Senior Mechanical Engineering major from Madison, Alabama who completed 3 co-op rotations with NASA Marshall Space Flight Center. Some of Chris' projects included developing a stage separation maneuver of Nanolaunch Vehicles, formulating a base design for an Active Mass Translation device, and assisting with the design of CubeSat systems. One of Chris' designs was even chosen by the Mechanical System Design and Integration group to be integrated into the maiden voyage of the SLS rocket in 2019. Chris stated, "One of the most exciting and rewarding aspects of working at NASA is having the opportunity to see your hard work launched into space to perform extraordinary scientific missions." He plans on pursuing a master's degree in Mechanical Engineering and researching combustion and thermal systems with space related applications. During his time here at Mississippi State, Chris



has been involved with the Space Cowboys Rocket Team and Center for Advanced Vehicular Systems, has been on the President's Scholar and Dean's List, and a member of Phi Delta Theta Fraternity.

Intern of the Year - Jordan Lucki, The Ohio State University
Jordan Lucki is a Senior at The Ohio State University, pursuing a de-

gree in Chemical Engineering with a minor in Integrated Business and Engineering. He is very involved in giving back to the community where he grew up, and the OSU student organization he founded three years ago, "MoneyThink". This organization teaches basic financial literacy skills and provides support for post-high school education to students in the Greater Columbus area. He also volunteers at The Ohio State University Wexner Medical Center and a Career Fair Coach for OSU Engineering Career Services. During his internship with DaVita Medical Group, Jordan was tasked with determining where and how machine learning and artificial intelligence technology could be used to benefit the healthcare business and its patients. His experience with DaVita showed him how passion drives success. Every day, he had the mentality that his work was going to improve the lives of some of the sickest patients in the US. And having the opportunity to help others through his work, while combining it for his passion with science and technology drove him to be very successful.



Page 4

CEED Awards—Congratulations to our Recipients!

Lou Tackas Award

Reginald McGregor, Manager of Engineering Employee Development and STEM outreach at Rolls-Royce Corporation.

Reginald is a Mechanical Engineer with more than 15 years' experience in various roles in RRC. Reginald managed the engineering co-op program for 8 years and was instrumental creating and launching the RR Defense Services co-op program in 2014. He is actively involved with workforce development and educational initiatives. He serves on Governor-appointed Region 5 Works Council; Indiana STEM Advisory Council; President, Lawrence Township School Board; STEMx National Advisory Board; Purdue Engineering Education Industrial Advisory Council; Marion County STEM Coalition; Indiana Chamber of Commerce K-12 and Workforce Committee Million Women Mentor Steering Committee, Employ Indy Youth Center; and Indiana Afterschool Network Board.



From left to right Sandra L. English, Reginald McGregor, Anita M. Todd



Alvah K. Borman Award

Sandra L. English, J.D., M.P.A., Senior Manager for the Center for Engineering and Experiential Learning at the Washkewicz College of Engineering, Cleveland State University (CSU).

Sandra has more than doubled student enrollment and employer engagement at CSU. She is committed to Diversity and Inclusion, serving on the Engineering Dean's Diversity Council, faculty/staff advisor to the National Society of Black Engineers and co-advisor to the Society for Hispanic Professional Engineers. Over the last 5 years, she has worked with the Ohio Cooperative Education Association to increase industry engagement and sponsorship by over 90%. She has served as Conference Chair, participated on the scholarship committee, served as corresponding secretary and currently is the treasurer. Sandra has been active on the Conference for Industry and Education Collaboration (CIEC) management team for the past four years. She has served in the role of program chair for the Cooperative Experiential Education Division (CEED), CIEC Sponsorship Chair and is the newly selected CIEC Site Selection Chair. This past year, she has served as CEED Chair and through her involvement and leadership; industry engagement has more than doubled. Her collaborative efforts with the 2017 ASEE Conference for the CEED division lead to a record number of attendees from both academia and industry. Sandra holds a BA from Ursuline College and a J.D. / M.P.A. from Cleveland-Marshall College of Law/Maxine Levin College of Urban Affairs, Cleveland State University.

Alvah K. Borman Award

Anita M. Todd, Ed.D. Director, Master of Engineering Internship Program University of Cincinnati

Anita began her career as a co-op student through Penn State with Cummins Engine Company, later accepting a full-time position as a Product Development Engineer. In 1995, she started as the Associate Director for the Penn State Engineering Co-op Program, later being promoted to the Director. In 2002, she relocated to Cincinnati, serving as an adjunct, assistant, and associate professor of Professional Practice at the University of Cincinnati, later accepting an Associate Director role. During her 20+ years in the field of engineering experiential education, Dr. Todd has held leadership roles in PennACE (president), CEIA (president), ASEE/CEED, and SWE. In 2004,Dr. Todd received the Dean Herman Schneider Award (CEIA). Dr. Todd holds a BSME (Penn State), M.Ed. (UC) and D.Ed. (UC). She currently resides in DuBois, PA with her husband of 26 years, Doug. She has two sons, and three grandchildren. She loves travel, hiking, golfing, reading, theater, trivia, and spending time with "the grands".

Congrats to Paul Plotkowski, Dean, Grand Valley State



ASEE COOPERATIVE AND EXPERIENTIAL EDUCATION DIVISION

Newsbrief Editor

Anita Todd, University of Cincinnati anita.todd@uc.edu

Newsbrief Co-Editor

Brian Blair, University of Alabama, Tuscaloosa brian.d.blair@eng.ua.edu

SEND US YOUR NEWS!

http://ceed.asee.org/

Paul Plotkowski, dean of the Seymour and Esther Padnos College of Engineering and Computing, was awarded the MFG Talent Champion Award from the Michigan Manufacturers Association (MMA).

The award was presented to Plotkowski at the MFG Excellence Awards Gala November 9 in Lansing. The award is given to an individual who advocates for the critical need of attracting the next generation workforce to manufacturing careers in Michigan.

CONGRATULATIONS PAUL!!



Paul Plotkowski, center, received the MFG Talent Champion Award from the Michigan Manufacturers Association. Photo Credit: Courtesy

Meet the New CEED Chair - Craig Gunn, Michigan State University

Craig Gunn is the Director of the Communication Program in the Department of Mechanical Engineering at Michigan State University. He is a Senior Academic Specialist. His duties include the integration of communication skill activity into all courses within the mechanical Engineering program, including overseas experiences.

Craig has worked closely with the Cooperative Engineering Education Division of the College of Engineering to monitor the communication skills of students who co-op during their college years. He is currently Chair of the Cooperative and Experiential Education Division of ASEE. He served as the editor of the CEED Newsbriefs for almost 20 years



and has co-author of twelve textbooks focusing on engineering freshmen orientation. He currently teaches a graduate seminar course focusing on the communication skills, both written and oral, of graduate students and visiting speakers. He also teaches a required junior course in professionalism. He has been very active in the American Society for Engineering Education where he has served as a national officer, a regional/section chair, and written multiple papers. He is also a Fellow of ASEE.

HAVE A GREAT YEAR CRAIG!





2018 ASEE ANNUAL CONFERENCE & EXPOSITION

JUNE 24-27, 2018 | SALT PALACE CONVENTION CENTER | SALT LAKE CITY, UT

SASEE

ASEE is celebrating its 125th anniversary this year at the annual conference in beautiful Salt Lake City, UT, June 24-27, 2018. Conference registration and housing are now open.

https://www.asee.org/conferences-and-events/conferences/annual-conference/2018

Attached is the schedule for CEED-sponsored and co-sponsored events and other CEED information (5 pages).

We have:

- 3 technical sessions
- Panel session
- Distinguished Lecture
- 3 co-sponsored sessions
- CEED Social (complimentary light refreshments and drinks)

A host of other ASEE sessions and activities, of which only a small fraction is represented in the schedule. For further details, please go to the conference online session locator at this link: https://www.asee.org/public/conferences/106/registration/sessions

Upcoming CIEC and ASEE Annual Conferences

CIEC

2019	Hotel Monteleone		New Orleans, Louisiana
2020	Hilton Orlando Lake Buena Vista		Orlando, Florida
2021	Hyatt Regency Orange County		Garden Grove, California
2022	Marriott Phoenix Tempe at the Buttes		Tempe, Arizona
ASEE			
2018	June 24 - 27	Salt Lake (City, Utah
2019	June 16 - 19	Tampa, Flo	orida
2020	June 21 - 24	Montréal, Québec, Canada	
2021	June 27 - 30	Long Beac	ch, California
2022	June 26 - 29	Minneapol	is, Minnesota
2023	June 25 - 28	Baltimore,	Marvland

Sunday, June 24

11:30-12:30 CEED Board Lunch

(open to Board members only)
Offsite restaurant, TBD (Café Molisse)

12:00-1:00 PIC V Business Meeting & Lunch

(open to Division chair/elect/past only)
Salon H, Marriott at City Creek

12:00-1:00 Greet the Stars! New Members and First Time Attendees Luncheon

(by ASEE's invitation only)
Salt Palace Convention Center

1:00-4:00 CEED Board Meeting

(open to Board members only)
Room 250A, Salt Palace Convention Center

4:00-5:45 ASEE Division Mixer

Grand Ballroom, Salt Palace Convention Center

6:00-7:00 Focus on Exhibits: Welcome Reception

Exhibit Hall, Salt Palace Convention Center

Monday, June 25

8:00-9:30 Plenary

Salt Palace Convention Center

9:45-11:15 Focus on Exhibits: Brunch & NSF

Grantees Poster Session

Exhibit Hall, Salt Palace Convention Center

11:30-1:00 CEED Technical Session I

Room 155A, Salt Lake Convention Center

11:30-1:00 CEED Technical Session II

Room 155D, Salt Lake Convention Center

1:30-3:00 CEED Technical Session III

Salon H, Marriott at City Creek (Roundtable)

3:15-4:45 Interdivisional Town Hall: "Who's in the Driver's Seat of Engineering Education? Grand Ballroom I, Salt Palace Convention Ctr.

Tuesday, June 26

9:45-11:15 Plenary

Salt Palace Convention Center

11:30-1:00 Focus on Exhibits: Lunch & ASEE Division Poster

Exhibit Hall, Salt Palace Convention Center

1:30-3:00 (Panel) Postcard Roundtable: Preparing Co-Op and Engineering Students for the Engineering Workforce

Salon D, Marriott at City Creek

3:15-4:45 SIG: Graduate Students Leadership Roundtable

Salon B, Marriott at City Creek

3:15-4:45 SIG: Military Veterans Leadership Roundtable

Salon A, Marriott at City Creek

5:00-6:00 CEED Business Meeting

(open to all ASEE members)
Room 251C, Salt Palace Convention Center

6:30-8:30 CEED Social

(open to CEED members and invited guests)
Offsite restaurant TBD (Café Molisse)

Wednesday, June 27

9:45-11:15 CEED Distinguished Lecture: Bringing Engineering Out of the Classroom to Serve the Disability Community

Room 155B, Salt Palace Convention Center

11:30-1:00 Meeting for Incoming/Current Program and Division Chairs

251F, Salt Palace Convention Center



2019 CEED National Conferences

Conference for Industry & Education Collaboration, New Orleans, LA, Jan. 30-Feb. 1, 2019

Contact: Annalise Kelleher, Email: a.kelleher@csuohio.edu

American Society for Engineering Education, Tampa, FL, June 16-19, 2019

Contact: Diane LaFreniere, Email: lafrenid@gvsu.edu

CEED Board Contacts

Interested in joining the CEED Board?

CEED Board Chair, Craig Gunn, Email: gunn@egr.msu.edu

Interested in joining or renewing CEED membership in ASEE?

Membership Chair, Maureen Barcic, Email: paub2m@pitt.edu

Interested in nominating a colleague or employer for an award?

Award Chair, Maureen Schomaker, Email: maureen.schomaker@uc.edu

Interested in nominating a student for co-op or intern-of-the-year?

Award Chair, Sarah Kostanski, Email: s.kostanski@neu.edu

Have news/announcements to share with CEED members?

Newsletter Editor, Anita Todd, Email: anita.todd@uc.edu

Interested in funding your research study?

Research Chair, Bernadette Friedrich, Email: friedric@egr.msu.edu

CEED website: http://ceed.asee.org/



Tuesday, June 26, 1:30-3:00, Salon D, Mariott at City Creek

Joint Panel Session: Postcard Roundtable

Preparing Co-Op and Internship Students for the Engineering Workforce

Sponsoring Divisions: Cooperative & Experiential Education Division, Engineering Ethics

Division

Session Description:

Since its founding in 1906 by Herman Schneider, engineering dean at the University of Cincinnati, the co-op model (and by extension internships) has been adopted by many schools. While fundamentally, the co-op goal and model has not changed in over a century, workforce demands have changed, and with it, the challenges that co-op practitioners and faculty administrators face. This panel session will cover various aspects of preparing co-op and internship students to transition from school to the engineering workforce (and back to school). This is an interactive session. Speakers will give a brief presentation followed by the opportunity for attendees to discuss topics in further detail with individual speakers in a roundtable format.

(1) Nuts and Bolts of Starting a Co-op or Internship Program: This presentation and discussion is targeted to faculty or practitioners who are interested in starting a co-op or a newly-formed co-op or internship program. A seasoned co-op professional will lead the discussion on best practices and tips ("What I wish I had known when I was starting out...") for creating a smooth transition to the workforce and back to school for co-op and internship students.



Mary Andrade, U. Of Louisville, CEED

Bio: Mary Andrade is the Associate Director of the Career Development and Cooperative Education office at the University of Louisville JB Speed School of Engineering. She holds a Master of Science degree in Counseling Psychology with an emphasis in Vocational Psychology. Ms. Andrade oversees the mandatory coop program placing students in more than 1,000 rotations each year. She has more 20 years of experience in experiential education,

internships, and cooperative education at a tier one research institution. She is an active member in the Cooperative Education and Internship Association and the National Association of Colleges and Employers. Her current research areas focus on student transition issues post co-op and resource development for female engineers.



(2) Addressing Changing Workforce Demands: This presentation and discussion is targeted to seasoned professionals and faculty administrators responsible for their school's or department's co-op or internship program. A veteran co-op professional will lead the discussion on contemporary issues such as: helping employers to increase diversity among its workforce; managing employer relationships; latest cutting-edge software to manage co-op /intern placements with employers; and the regulatory environment.



Sandra English, Cleveland State, CEED

Bio: Sandra L. English serves as the Sr. Manager for the Center for Engineering Experiential Learning (CEEL) Office at the Waskewicz College of Engineering, Cleveland State University. She holds a Bachelor of Arts from Ursuline College and a joint Juris Doctor and Master of Public Administration degrees from Cleveland-Marshall College of Law and

Maxine Levin College of Urban Affairs at Cleveland State University. Dr. English promotes and presents on concepts as well as best practices of cooperative education to students, faculty and employers. She also assists and participates on the Dean's Diversity Council to implement programs and initiatives that reflect the College's commitment to diversity. Dr. English serves as Chair for the Cooperative Experiential Education Division (CEED), Treasurer for Ohio Cooperative Education Association (OCEA), and sits on the Horizon Science Academy school board.

(3) Ethical Practice in the Engineering Workplace: This presentation and discussion is targeted to attendees interested in strategies to prepare students to understand and deal with ethical issues in the engineering workplace. A faculty with expertise in ethics and digital culture will lead the discussion.



Jonathan Beever, U. of Central Florida, Engineering Ethics Division Bio: Jonathan Beever is Assistant Professor Ethics and Digital Culture in the Department of Philosophy and the Texts & Technology Ph.D. program at The University of Central Florida and the Chair of the Engineering Ethics Division of ASEE. He has held postdoctoral positions with Penn State's Rock Ethics Institute and with Purdue University's Weldon School of Biomedical Engineering. He has had the privilege of holding fellowships with the Kaufmann Foundation, the Aldo Leopold

Foundation, the Forest History Society, and the Global Sustainable Soundscape Network. Dr. Beever works at the intersection of environmental ethics and bioethics, focusing on questions of ethics, science, and representation. He has published work in diverse venues including the Science and Engineering Ethics, the American Journal of Bioethics, Environmental Philosophy, Resilience: A Journal of Environmental Humanities, Biosemiotics, Routledge Press, and Purdue University Press, among others. His current research projects engage several disciplines, from engineering to ecological science.



Wednesday, June 27, 9:45-11:15, Room 155B, Salt Palace Convention Center

Distinguished Lecture

Bringing Engineering Out of the Classroom to Serve the Disability Community

Sponsors: Cooperative & Experiential Education Division, Pre-College Engineering Education Division, Biomedical Division, Women in Engineering Division, Minorities in Engineering Division, Multidisciplinary Engineering Division, Design in Engineering Education Division

Session: Access to traditional prosthetics for children is challenging due to high costs, healthcare policies, and technology limits. A local family contacted Manero while he was working on his graduate research. Then six-year-old Alex Pring was born without most of his right arm. Alex performed daily activities by making use of his left hand and his mom's assistance. His family wanted to buy a prosthetic, but the high costs and accessibility challenges made that not feasible. Alex's mom connected with Manero, then a doctoral engineering student at the University of Central Florida (UCF). Working with a passionate team of engineers and designers, they created a 3-D printed electromyographic arm for Alex, and Limbitless Solutions was born. Limbitless Solutions is a non-profit direct support organization at UCF designing affordable and expression bionic arms for children at no cost to families. Dr. Manero and his team advise research and design teams at UCF to improve access to bionics and to conduct research to advance empowerment technology. Engaging with K-12 local schools to promote the social impact that engineering is capable of, the team is looking to develop a more inclusive and creative engineering landscape for the future. Limbitless Solutions has received extensive national recognition for their work including being featured as part of Microsoft's Collective Project.



Albert Manero, Limbitless Solutions, University of Central Florida

Bio: Dr. Albert Manero holds a doctorate in Mechanical Engineering from the University of Central Florida (UCF). He was awarded a Fulbright Fellowship to Germany to pursue his doctoral research on non-destructive characterization of aerospace composites via synchrotron radiation. Dr. Manero is the Co-Founder and President of Limbitless Solutions at UCF. Dr. Manero has received numerous awards, including the Christine Mirzayan Science & Technology Policy Graduate Fellowship from The National

Academies of Sciences, Engineering, and Medicine, which allowed him to spend several weeks in Washington D.C. learning about science and technology policy and education. Limbitless Solutions and artistic team members have met White House staff at the White House Design for All Showcase to celebrate inclusive design and assistive technology and the Smithsonian American Art Museum to showcase their accessibility-friendly bionic arm video game training system.

