

## M220-MONDAY WORKSHOP: Launching the OEC's Engineering Ethics Educators Community of Practice: A Workshop to Share Strategies and Discuss Goals

**Workshop** Engineering Ethics Division  
**Mon. July 26, 2021 9:00 AM to 12:00 PM - Pacific Daylight Time**  
**Virtual, Online**

### Session Description

#### Free ticketed event

The Online Ethics Center for Engineering and Science (OEC) has recently launched several Communities of Practice (CoPs). This ASEE workshop will serve to launch "Teaching Ethics," the newest CoP.

CoPs are an interactive feature of the OEC, able to host functions such as case writing groups, discussion boards, webinar series, syllabus design workshops, or other activities deemed of interest and value to CoP members. The OEC provides a wealth of resources in support of those who are teaching ethics. This latest CoP will serve to host and support those who have an interest in ethics instruction in ...

(continued)

#### Moderated by

1. Dr. Rosalyn W. Berne

#### Speakers

1. **Dr. Rosalyn W. Berne**

University of Virginia

Rosalyn W. Berne, PhD is Associate Professor in the School of Engineering and Applied Sciences at the University of Virginia in the program of Science, Technology and Society (STS) within the department of Engineering and Society. She received advanced degrees from the University of Virginia, in Communication Studies, and in Religious Studies with a focus on Bioethics. Rosalyn explores the intersecting realms of emerging technologies, science, fiction and myth, and the links between the human and non-human worlds. Her academic research and writing span considerations of ethics in biotechnology, n ... (continued)

2. **Dr. Laura R. Grossenbacher**

University of Wisconsin - Madison

Dr. Grossenbacher is Director of Undergraduate Program Review and Director of the Technical Communication Program in the College of Engineering at the University of

Wisconsin-Madison. She has been teaching courses in engineering communication and ethics for over 20 years. In collaboration with colleagues Howard Rosen, Andi Bill, Kevin Rogers, Ned Paschke, and Joy Altweis, she has been teaching engineering ethics for continuing education credits to professional engineers since 2012. Laura has been developing ethics cases to use with a variety of different constituents, including engineers working ... (continued)

**3. Dr. Rider W Foley**

University of Virginia

Dr. Foley is an associate professor in the science, technology & society program in the Department of Engineering and Society at the University of Virginia. He is the principal investigator at University of Virginia on the '4C Project' on Cultivating Cultures of Ethical STEM education with colleagues from Notre Dame, Xavier University and St. Mary's College. He is also the co-leader of the 'Nano and the City' thematic research cluster for the Center for Nanotechnology in Society at Arizona State University.

**4. Dr. Karin Ellison**

Arizona State University

Dr. Ellison's research, teaching and program development activities span the areas of research ethics, ethics education development and the history of American science and technology. As director of the Life Science Ethics Program with the School of Life Sciences, she coordinates opportunities for students, faculty and staff to learn about and reflect on the ethical dimensions of advances in the life sciences and life science research. She is a Co-PI on the Online Ethics Center, NSF-funded project.

**5. Ms. Kelly Laas**

Kelly Laas is the Librarian/Information Researcher at the Center for the Study of Ethics in the Professions (CSEP) at the Illinois Institute of Technology. During her years at the Center, she has supervised several projects relating to the development of online ethics resources and collections, including the management of CSEP's large Online Codes of Ethics collection and the development of the NanoEthicsBank, a web-based bibliographic database of materials on the social and ethical implications of nanotechnology. She is a Co-PI on the Online Ethics Center, NSF-funded project, and is developing t ... (continued)

**6. Dr. Rosalyn W. Berne**

University of Virginia

T220-Past, Present, and Future of the OEC (Online Ethics Center)

**Special** Engineering Ethics Division

**Tue. July 27, 2021 9:45 AM to 11:15 AM - Pacific Daylight Time**

**Virtual, Online**

### **Session Description**

The OEC owes its existence to the founding leadership of Professor Caroline Whitbeck, a pioneer of active learning methods. Students at the Massachusetts Institute of Technology (MIT), and at Case Western Reserve University (CWRU) from 1997 to 2007, were the primary creators of many of the OEC pages and made many invaluable contributions to its design, maintenance, and accessibility. Subsequent to being hosted by Case Western Reserve University, the OEC transferred to the National Academy of Engineering in 2007, and to the University of Virginia in 2020. Over the years the OEC has grown to become ... [\(continued\)](#)

### **Moderated by**

1. Dr. Rosalyn W. Berne

### **Speakers**

1. **Dr. Rosalyn W. Berne**

University of Virginia

Rosalyn W. Berne, PhD is Associate Professor in the School of Engineering and Applied Sciences at the University of Virginia in the program of Science, Technology and Society (STS) within the department of Engineering and Society. She received advanced degrees from the University of Virginia, in Communication Studies, and in Religious Studies with a focus on Bioethics. Rosalyn explores the intersecting realms of emerging technologies, science, fiction and myth, and the links between the human and non-human worlds. Her academic research and writing span considerations of ethics in biotechnology, n ... [\(continued\)](#)

2. **Dr. Karin Ellison**

Arizona State University

Dr. Ellison works in the areas of research ethics and history of technology. As Associate Director, Center for Biology at Society, she provides responsible conduct of research

education to life scientists and is a founding member the doctoral degree program in science studies. As a Dean's Fellow, she is reviewing the student academic integrity policy for the College of Liberal Arts and Sciences. Prior to coming to ASU, Dr. Ellison was Interim Assistant Dean for Research Policy and Compliance at the University of Wisconsin-Madison. Dr. Ellison's Ph.D. is from the Program in Science, Technology and Society at MIT.

### 3. Ms. Kelly Laas

Kelly Laas is the Librarian/Information Researcher at the Center for the Study of Ethics in the Professions (CSEP) at the Illinois Institute of Technology. During her four years at the Center, she has supervised a number of projects relating to the development of online ethics resources and collections, including the management of CSEP's large Online Codes of Ethics collection and the development of the NanoEthicsBank, a web-based bibliographic database of materials on the social and ethical implications of nanotechnology. She also has collaborated with the National Academy of Engineering's Cente ... (continued)

### 4. Dr. Qin Zhu

Colorado School of Mines

Qin Zhu is an Assistant Professor in the Ethics Across Campus Program and the Division of Humanities, Arts & Social Sciences at Colorado School of Mines, where he is co-directing the Daniels Fund Program in Professional Ethics Education that provides scholarly and grant support for faculty to integrate ethics into applied science and engineering curricula. Qin serves as a graduate faculty member in the Master's Program in Natural Resources and Energy Policy at Mines. Qin is also Associate Editor for International Perspectives at the National Academy of Engineering's Online Ethics Cent ... (continued)

[T320-Engineering Ethics Division Business Meeting](#)

**Business Engineering Ethics Division**

**Tue. July 27, 2021 11:30 AM to 1:00 PM - Pacific Daylight Time**

#### **Session Description**

Engineering Ethics Division Business Meeting

**Moderated by**

1. Dr. Qin Zhu and Dr. Xiaofeng Tang

T420-Innovative, Engaging Pedagogies for Engineering Ethics Education

Technical Engineering Ethics Division

Tue. July 27, 2021 1:45 PM to 3:15 PM - Pacific Daylight Time

Virtual, Online

#### Moderated by

1. Dr. Andrea Gregg and Dr. Tracy Anne Hammond

#### Papers Presented

1. **Let's Play! Gamifying Engineering Ethics Education Through the Development of Competitive and Collaborative Activities** [\[view paper\]](#)  
Prof. Michael F. Young (University of Connecticut), Landon Bassett (University of Connecticut), Dr. Daniel D. Burkey (University of Connecticut), Dr. Scott Streiner (Rowan University), and Joshua Bourne Reed ()
2. **Piloting an Ethics Choose-Your-Own Adventure Activity in Early Engineering Education** [\[view paper\]](#)  
Prof. Jennifer Fiegel (University of Iowa), Dr. Beth Rundlett (University of Iowa), Dr. A. Allen Bradley Jr. (The University of Iowa), and Katelyn Rose Murhammer (University of Iowa)
3. **Using the Boeing Max Air Disaster as A Role-play Scenario for Teaching Ethical Thinking** [\[view paper\]](#)  
Ashish Hingle (George Mason University), Dr. Aditya Johri (George Mason University), Huzefa Rangwala (Affiliation unknown), and Dr. Alexander Monea (George Mason University)
4. **Examining Faculty Barriers and Challenges in Adopting Ethical Pedagogies in Online Environments** [\[view paper\]](#)  
Mr. Samuel Aaron Snyder (Virginia Polytechnic Institute and State University) and Dr. Diana Bairaktarova (Virginia Polytechnic Institute and State University)

T520-Our Ethical Actions: A Conversation About the New ASEE Codes

Panel Engineering Ethics Division

Tue. July 27, 2021 3:30 PM to 5:00 PM - Pacific Daylight Time

Virtual, Online

#### Session Description

ASEE has formed an Ethics Committee to address issues related to the new Code of Ethics for Engineering Educators, the Volunteer Code of Ethics, and the Code of Conduct for Activities and Events. This special session will introduce members of the Ethics Committee and provide an opportunity for discussion about the Codes and how they can be used to support ethical conduct ourselves and augment

conversations with our students and colleagues. Details about the codes can be found at <https://www.asee.org/member-resources/resources>.

**For those interested in:** Advocacy and Policy, Broadening Participation in Engineering and Engineering Technology, and New Members

**Moderated by**

1. Rebecca Bates

**Speakers**

1. **Dr. Jonathan Beever**

University of Central Florida

.

2. **Dr. Rosalyn W. Berne**

University of Virginia

.

3. **Dr. Andrew O. Brightman**

Purdue University at West Lafayette (COE)

.

4. **Dr. Joseph R. Herkert**

North Carolina State University at Raleigh

.

5. **Dr. Michael C. Loui**

University of Illinois at Urbana - Champaign

.

## W120·Cross-cultural Sensitivity, Moral Imagination, and Diversity in Engineering Ethics Education

Technical Engineering Ethics Division

Wed. July 28, 2021 8:00 AM to 9:30 AM - Pacific Daylight Time

Virtual, Online

### Moderated by

1. Dr. Nasser Saleh P.Eng.

### Papers Presented

1. **A Graduate-level Engineering Ethics Course: An Initial Attempt to Provoke Moral Imagination** [\[view paper\]](#)  
Mr. Yousef Jalali (Virginia Polytechnic Institute and State University), Dr. Christian Matheis (Guilford College), and Dr. Marc Edwards (Virginia Polytechnic Institute and State University)
2. **Culturally-based Ethical Barriers for American Indian/Alaska Native Students and Professionals in Engineering** [\[view paper\]](#)  
Prof. Jani C. Ingram (Northern Arizona University), Dr. Angelina E. Castagno (Northern Arizona University), and Dr. Ricky Camplain (Affiliation unknown)
3. **Global Engineering Ethics: What? Why? How? And When?** [\[view paper\]](#)  
Dr. Rockwell Franklin Clancy III (Delft University of Technology) and Dr. Qin Zhu (Colorado School of Mines)
4. **Work in Progress: Perception of the Culture of Disengagement by Minoritized Students** [\[view paper\]](#)  
Mr. Luan M. Nguyen (Iowa State University of Science and Technology), Dr. Nell Gabiam (Affiliation unknown), and Dr. Cristina Poleacovschi (Affiliation unknown)

## W220·Engineering Ethics Division Poster Session: Neuroethics and Secondary STEM Classrooms

Poster Engineering Ethics Division

Wed. July 28, 2021 9:45 AM to 11:15 AM - Pacific Daylight Time

Virtual, Online

### Moderated by

1. Ms. Kristen Bergsman

### Papers Presented

1. **Partnerships and Pedagogies for Introducing Neuroethics to Secondary STEM Classrooms [Poster]** [\[view paper\]](#)  
Dr. Kristen Clapper Bergsman (University of Washington), Sara Goering (University of Washington), and Dr. Eric H. Chudler (University of Washington)

## W420-Industrial, Professional, and Practical Contexts of Engineering Ethics

Technical Engineering Ethics Division

Wed. July 28, 2021 1:45 PM to 3:15 PM - Pacific Daylight Time

Virtual, Online

### Moderated by

1. Mr. Sergio Guillen Grillo P.E. and Dr. Chandra Bhushan Asthana P.E.

### Papers Presented

1. **Decision-making in a Competitive Business Environment: A Guided Case Study Discussion** [\[view paper\]](#)  
Dr. Yilmaz Hatipkarasulu (University of Texas at San Antonio)
2. **Encountering Engineering Ethics in the Workplace: Stories from the Trenches** [\[view paper\]](#)  
Ms. Dayoung Kim (Purdue University, West Lafayette), Ms. Shiloh James Howland (Brigham Young University), and Prof. Brent K. Jesiek (Purdue University, West Lafayette)
3. **Work in Progress: Organizational Culture and Engineers' Moral Values Across Industry Sectors: Study Overview** [\[view paper\]](#)  
Ms. Dayoung Kim (Purdue University, West Lafayette), Prof. Brent K. Jesiek (Purdue University, West Lafayette), Dr. Michael C. Loui (University of Illinois at Urbana Champaign), and Prof. Chuck Huff (Affiliation unknown)

## W520-Ethics Integration in Engineering Design

Technical Engineering Ethics Division

Wed. July 28, 2021 3:30 PM to 5:00 PM - Pacific Daylight Time

### Moderated by

1. Marie Stettler Kleine and Dr. John W Duggan P.E.

### Papers Presented

1. **Collaborating to Integrate Ethics in an Introductory Engineering Computing Course** [\[view paper\]](#)  
Dr. Brooke Odle (Hope College) and Dr. Greg Bassett (Hope College)
2. **Integration of Ethics-Focused Modules into the Steps of the Engineering Design Process** [\[view paper\]](#)  
Ms. Jessica R. Edelson (Duke University), Micalyn Struble (Duke University), Ms. Reya Magan (Duke University), and Dr. Ann Saterbak (Duke University)
3. **Sustainable and Ethical Packaging: Designing for Environmental and Social Justice** [\[view paper\]](#)  
Ms. Irini Spyridakis (University of Washington)



## R120-Understanding Students' Authentic and Reflective Experiences of Ethics Education

Technical Engineering Ethics Division

Thu. July 29, 2021 8:00 AM to 9:30 AM - Pacific Daylight Time

Virtual, Online

### Moderated by

1. Dr. Rajani Muraleedharan and Dr. Bahaa Ansaf

### Papers Presented

1. **Investigating On-campus Engineering Student Organizations as Means of Promoting Ethical Development** [\[view paper\]](#)  
Mr. Luan M. Nguyen (Iowa State University of Science and Technology), Dr. Cristina Poleacovschi (Iowa State University of Science and Technology), Dr. Kasey M. Faust (University of Texas at Austin), Kate Padgett Walsh (Iowa State University of Science and Technology), Michaela Leigh LaPatin P.E. (University of Texas at Austin), Dr. Scott Grant Feinstein (Affiliation unknown), and Dr. Cassandra Rutherford (Affiliation unknown)
2. **Longitudinal Qualitative Case Study of One Engineering Student's Perceptions of Ethics and Social Responsibility: Corvin's Story** [\[view paper\]](#)  
Dr. Stephanie Claussen (San Francisco State University), Ms. Shiloh James Howland (Brigham Young University), Dr. Swetha Nittala (Purdue University, West Lafayette), Prof. Brent K. Jesiek (Purdue University, West Lafayette), and Dr. Carla B. Zoltowski (Purdue University, West Lafayette)
3. **Work in Progress: Let's Talk About Ethics! A Qualitative Analysis of First-year Engineering Student Group Discussions Around Ethical Scenarios** [\[view paper\]](#)  
Landon Bassett (University of Connecticut), Dr. Jennifer Pascal (University of Connecticut), Dr. Richard Tyler Cimino (New Jersey Institute of Technology), Dr. Kevin D. Dahm (Rowan University), Dr. Daniel D. Burkey (University of Connecticut), and Dr. Scott Streiner (Rowan University)
4. **Undergraduate Engineering Students' Exposure to, and Valuation of, Ethics Through the Lens of Socialization** [\[view paper\]](#)  
Dr. Madeline Polmear (University of Florida), Dr. Angela R. Bielefeldt (University of Colorado Boulder), Dr. Chris Swan (Tufts University), and Dr. Daniel Knight (University of Colorado Boulder)

## R320-Engineers' Experiences of Ethics in Practice: An Interactive Exploration With Six Personas

Special Engineering Ethics Division and Liberal Education/Engineering & Society Division

Thu. July 29, 2021 11:30 AM to 1:00 PM - Pacific Daylight Time

Virtual, Online

### Session Description

Understanding how engineers experience ethics in practice can support the alignment of engineering ethics education approaches and preparing engineers for professional ethical practice. Over the last three years, we have been conducting a phenomenographic study in order to capture, analyze, and map the qualitatively different ways in which engineers experience ethical engineering in practice in the health products industry. We identified six ways of experiencing ethical engineering, referred to as “categories of description.” Variation between these categories included aspects such as perceived c ... [\(continued\)](#)

**For those interested in:** Academia-Industry Connections

### **Moderated by**

1. Dr. Alison J Kerr

### **Speakers**

1. **Dr. Alison J Kerr**

Purdue University at West Lafayette (PPI)

Alison Kerr is a Senior Researcher of Leadership and Executive Development at the National Center for Professional and Research Ethics (NCPRE) at the University of Illinois at Urbana-Champaign. Dr. Kerr completed her PhD in Industrial-Organizational Psychology and the University of Tulsa in Tulsa, Oklahoma. She also has a M.A. degree in industrial-organizational psychology from The University of Tulsa and a B.A. degree in psychology from the University of Southern California in Los Angeles, California. Her dissertation research was a comprehensive evaluation of a professional ethics training pro ... [\(continued\)](#)

2. **Dr. Andrew O. Brightman**

Purdue University at West Lafayette (COE)

Andrew O. Brightman serves as Assistant Head for Academic Affairs and Associate Professor of Engineering Practice in the Weldon School of Biomedical Engineering. His research background is in cellular biochemistry, tissue engineering, and engineering ethics. He is committed to developing effective pedagogies for ethical reasoning and engineering design and for increasing the diversity and inclusion of engineering education.

3. **Dr. Justin L Hess**

Purdue University at West Lafayette (COE)

Dr. Justin L Hess is an assistant professor in the School of Engineering Education at Purdue University. Dr. Hess's research interests include exploring empathy's functional role in engineering; advancing the state of the art of engineering ethics instruction; and evaluating learning in the spaces of design, ethics, and sustainability. Justin received his PhD from Purdue University's School of Engineering Education, as well as a Master of Science and Bachelor of Science from Purdue University's School of Civil Engineering. Justin is the 2020 program chair for the ASEE LEES division.

**4. Dr. Nicholas D. Fila**

Iowa State University of Science and Technology

Nicholas D. Fila is an assistant research professor in the Department of Electrical and Computer Engineering at Iowa State University. He earned a B.S. in Electrical Engineering and a M.S. in Electrical and Computer Engineering from the University of Illinois at Urbana-Champaign and a Ph.D. in Engineering Education from Purdue University. His current research explores engineering students' experiences with innovation, empathy across engineering education and engineering design settings, design thinking in the course design process, and novel uses of qualitative research methods in engineering education.

**5. Dr. Carla B. Zoltowski**

Purdue University at West Lafayette (COE)

Carla B. Zoltowski is an assistant professor of engineering practice in the Schools of Electrical and Computer Engineering and (by courtesy) Engineering Education, and Director of the Vertically Integrated Projects (VIP) Program within the College of Engineering at Purdue. She holds a B.S.E.E., M.S.E.E., and Ph.D. in Engineering Education, all from Purdue. Her research interests include the professional formation of engineers, diversity, inclusion, and equity in engineering, human-centered design, engineering ethics, and leadership.

**6. Dr. Michael C. Loui**

University of Illinois at Urbana - Champaign

Recently retired, Michael C. Loui was the Dale and Suzi Gallagher Professor of Engineering Education at Purdue University from 2014 to 2019. He was previously Professor of Electrical and Computer Engineering and University Distinguished Teacher-Scholar at the University of Illinois at Urbana-Champaign. He has published articles in computational complexity theory, in professional ethics, and in engineering education research. He currently serves on the

Advisory Group for the Online Ethics Center at the National Academy of Engineering. He is a Carnegie Scholar, a Fellow of the IEEE, and a Fellow of ... [\(continued\)](#)

#### 7. **Ms. Dayoung Kim**

Purdue University at West Lafayette (COE)

Dayoung Kim is a Ph.D. student in the School of Engineering Education at Purdue University. Her current research interest centers on engineering ethics and social responsibility, and she is specifically interested in cultural influences on engineers' moral formation. She earned her B.S. degree in Chemical Engineering at Yonsei University, South Korea in 2017.

#### 8. **Ms. Athena Lin**

Purdue University at West Lafayette (COE)

Athena Lin is a PhD student in the School of Engineering Education at Purdue University.

### R320B-Critical Reflections on Engineering Ethics Education

Technical Engineering Ethics Division

Thu. July 29, 2021 11:30 AM to 1:00 PM - Pacific Daylight Time

Virtual, Online

#### Moderated by

1. Mr. Luan Minh Nguyen and Dr. Rockwell Franklin Clancy III

#### Papers Presented

1. **Engineering Existential Risks** [\[view paper\]](#)  
Prof. Carl Mitcham (Colorado School of Mines)
2. **The Ultimate Goal of Ethics Education Should Be More Ethical Behaviors** [\[view paper\]](#)  
Dr. Rockwell Franklin Clancy III (Delft University of Technology) and Dr. Andrea Gammon (Delft University of Technology)
3. **STEM, Gender, Ethnicity, and Cyberbullying** [\[view paper\]](#)  
Dr. Claire Lynne McCullough P.E. (High Point University), Dr. Svetlana Chesser (Auburn University), Dr. Brian J. O'Leary (University of Tennessee at Chattanooga), and Dr. Bart L. Weathington (WECO Solutions)
4. **High School STEM Teacher Perspectives on the Importance and Obstacles to Integrating Engineering Ethical Issues in Their Courses** [\[view paper\]](#)  
Jake Walker Lewis () and Dr. Angela R. Bielefeldt (University of Colorado Boulder)

R434-DISTINGUISHED LECTURE: Engineering, Social Responsibility, and the Competing Accountabilities of Corporate Work: Lessons From the Field and Classroom

**Dist. Lecture** Liberal Education/Engineering & Society Division, Engineering Ethics Division, and Community Engagement Division

**Thu. July 29, 2021 1:45 PM to 3:15 PM - Pacific Daylight Time**  
**Virtual, Online**

**Session Description**

How is it that a group of professionals who all believe they are doing the “right thing” end up facilitating industrial development that can be judged as ethically suspect by others – and, at times, by themselves? Traditional answers to this question from engineers, as well as academics who think with them, call for protections for whistle-blowing as a check on management directives and corporate power. In this vein, engineering students learn to use codes of ethics to reason through their responses to potential professional dilemmas that pit their professional social responsibility against the i ... (continued)

**Moderated by**

1. Dr. Juan C. Lucena and Prof. Amy Slaton

**Speaker**

1. **Dr. Jessica Mary Smith**

Colorado School of Mines

Jessica M. Smith is Associate Professor in the Engineering, Design & Society Division at the Colorado School of Mines and Director of Humanitarian Engineering Graduate Programs. Her research and teaching bring anthropological perspectives to bear on questions of social responsibility and engineering. In 2016 the National Academy of Engineering recognized her Corporate Social Responsibility course as a national exemplar in teaching engineering ethics. Her book *Extracting Accountability: Engineers and Corporate Social Responsibility* will be published by The MIT Press in 2021. She is also the co ... (continued)

R520·Moral Development and Ethics Assessment in Engineering

**Technical** Engineering Ethics Division

**Thu. July 29, 2021 3:30 PM to 5:00 PM - Pacific Daylight Time**

**Moderated by**

1. Dr. Sreyoshi Bhaduri and Dr. Scott Streiner

## Papers Presented

- 1. Class Exercises Involving Ethical Issues Reinforce the Importance and Reach of Biomedical Engineering (and the Impact of the Coronavirus on Teaching Strategy and Measures of Assessment) [\[view paper\]](#)**  
Dr. Charles J. Robinson (Clarkson University), Ms. Loretta Driskel (Clarkson University), Erin Blauvelt (Clarkson University), and Ms. Laura Perry (Clarkson University)
- 2. The Relations between Ethical Reasoning and Moral Intuitions among Engineering Students in China [\[view paper\]](#)**  
Dr. Rockwell Franklin Clancy III (Delft University of Technology)
- 3. What Role do Civil Engineering Students See for their Profession in the COVID-19 Response? [\[view paper\]](#)**  
Michaela Leigh LaPatin P.E. (University of Texas at Austin), Dr. Cristina Poleacovschi (Iowa State University), Kate Padgett Walsh (Iowa State University of Science and Technology), Dr. Scott Grant Feinstein (Affiliation unknown), Dr. Cassandra Rutherford (Iowa State University), Mr. Luan Minh Nguyen (Iowa State University), Dr. Kasey M. Faust (University of Texas at Austin), and Liam Verses (University of Texas at Austin)
- 4. Engineering Alumni Rate the Impact of Co-curricular Activities on their Ethical Development [\[view paper\]](#)**  
Dr. Angela R. Bielefeldt (University of Colorado Boulder), Mr. Jake Walker Lewis (University of Colorado Boulder), Dr. Madeline Polmear (University of Florida), Dr. Daniel Knight (University of Colorado Boulder), and Dr. Chris Swan (Tufts University)