

2021 ASABE CA-NV STUDENT RALLY



SAVE THE DATE:
JANUARY 16-17, 2021



HOSTED VIRTUALLY

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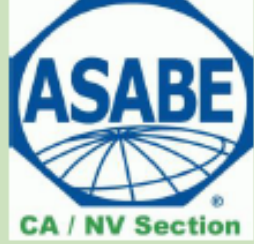
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**BRONZE
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IN KIND



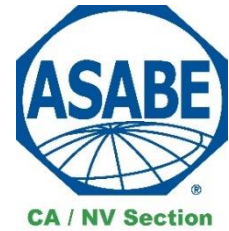


ASABE CA/NV Section

2nd Student Rally Speaker Bios

Hosted Virtually by Cal Poly SLO

January 16 – 17, 2021



Jose Amezcua



- President, Student Rally Executive Committee
- Undergraduate (Junior), Cal Poly San Luis Obispo, BioResource & Agricultural Engineering Department

Jose is a 3rd year BioResource and Agricultural Engineering (BRAE) major at Cal Poly SLO from Reedley, CA. Jose chose BRAE for 3 reasons: continue working for the Ag industry, build a career where he gets to see projects get designed and build, and build a family with colleagues. In the BRAE department, he has been able to pursue his interests in different aspects of engineering such as water resources, machinery design, and more. His career goals are to become a licensed engineer, focusing on water engineering. He is also involved with AES, Quarter Scale and Tractor Pull among other Cal Poly clubs.

Sessions:

- Welcome remarks
- Undergrad Panel Moderator
- Business Meeting Moderator
- Closing remarks

Gayle Baker, P.E.



- Chair, ASABE Professional Engineering Institute
- Chair, ASABE Young Professionals Committee
- Agricultural Engineer, Maurer-Stutz Inc.

Gayle earned a B.S. in Ag and Biosystems Engineering from Iowa State Univ. (ISU) in 2010. She began with IL USDA NRCS as a Field Engineer designing soil and water conservation practices, reviewing ag waste plans, and helping field staff with designs and training. In 2014, Gayle focused on animal waste planning and design with Maurer-Stutz, Inc. where she does project management and scope for planning and design, assists with state permitting, EPA regs, and is an NRCS Technical Service Provider (TSP). A 14-year ASABE member, she is on the P-121 Gunlogson Competitions Comm., Young Professional Community (YPC), NRES-27 Ag By-products & Animal Mortality Mgmt Sys Technical Comm., and the Prof. Engineers Inst. (PEI). Gayle is in the IL Farm Bureau, IL Agri-Women, and IL Beef Asso. Gayle, her husband Jacob, and daughter Brooke, live in west central Illinois on their grain and beef farm.

Sessions:

- ASABE Leadership Panel
- Engineering Licensure Speaker

[Dr. Tyler Barzee, E.I.T.](#)



- Past President, Student Rally Executive Committee
- Vice Chair, ASABE CA/NV
- Post-Doctoral Scholar, UC Davis Biological and Agricultural Engineering Department

Tyler is a Post-Doctoral Scholar in Biosystems Engineering at UC Davis where he works with Professor Ruihong Zhang and recently completed his PhD. He is an East Coast native and received his BS in Biosystems Engineering from Clemson University. His current research interests include: Agricultural Waste Management, Renewable Energy, Controlled Environment Engineering (e.g. Greenhouses and Bioreactors), Algal and Fungal Biotechnology, and Technoeconomic/Life Cycle Assessment. He is also passionate about engineering education, sustainable development, and interdisciplinary planetary health solutions (e.g. One Health). In his spare time, he enjoys cooking, traveling, listening to music, and going on walks/hikes. He is a classically-trained guitarist and you can usually find him around campus or on YouTube performing with the UCD Classical Guitar Ensemble. He is an animal lover and loves spending time with his cat Marvin who enjoys playing fetch, going for walks, eating spiderwebs, and devising plans for world domination. Tyler became a Biosystems Engineer because he believes it is among the most important and fascinating disciplines for sustaining human life and the environment into the future. To learn more about him, please visit <https://www.tylerbarzee.com/>.

Sessions:

- Graduate Student Panel
- Trivia Moderator
- Sierra Nevada Brewing Co. Moderator

[Meredith Brock](#)



- M.S. Student, Mississippi State University, Biological and Agricultural Engineering Department

Meredith Brock is a graduate student pursuing an M.S. in Biological Engineering at Mississippi State Univ. (MSU). Her research involves using remote sensing, geographic information systems (GIS), and watershed modeling to characterize surface water sources for irrigation in the Mississippi Delta. For the past year and a half, she has served as a NASA – Mississippi Space Grant Consortium Graduate Research Fellow and participates in weekly STEM outreach in the local K12 school district. This year she was elected as the president of the Graduate Student Association (GSA) at MSU. In ASABE, she has served as Member-at-Large of the Young Professional's Community (YPC) since 2019.

Session:

- Graduate Student Panel

Richard Cernansky



- Engineer, USDA Natural Resources Conservation Service State Nutrient Team

Richard is an Agricultural Engineer on the Natural Resources Conservation Service (NRCS) State Nutrient Management (SNM) Team based in Fresno, CA. USDA NRCS works with farmers, ranchers, and forest landowners to help them boost agricultural productivity and protect natural resources through conservation. The SNM Team was formed in 2006 to meet growing demands for conservation planning on dairies and other animal feeding operations in CA. Comprised of an engineer and agronomist, the team's mission is to advance adoption and implementation of comprehensive nutrient management planning (CNMP) to address water quality, air quality, and soil erosion resource concerns. Prior to 2006, Richard worked as an NRCS field office engineer in Chino, CA and as a product engineer for Kubota Tractor Corp. in Southern CA. Richard started at Modesto JC and received his bachelor's degree in Agricultural Engineering from UCD.

Session:

- Career Panel (Subdiscipline: Dairy/Biological)

Trevor Cope



- Guest Experiences Supervisor, Sierra Nevada Brewing Company

Bio not available.

Session:

- Sierra Nevada Brewing Co. Tour Speaker and Moderator

Eric Ehn



- Product Management Director, Blue River Technology

Erik leads the team that develops robotic sprayers with computer vision and machine learning to apply inputs at an individual plant level accuracy. Ehn joined Blue River Tech in 2016 to build the first artificial intelligence (AI) powered weeding machine for lettuce. In 2017, he led market development to expand the tech to weed control in cotton, showing 90% reduction in herbicide use by seeing and spraying only the weeds. After acquisition by John Deere, Erik still leads the development into new crops, machines, and applications of the tech. Prior, Ehn was with Trimble Navigation (2004-2016) where he developed GPS guided auto-steer, land leveling, and the precision ag product line, leading the GPS and core automation business unit. At Sensient Dehydrated Flavors (2000-2004), Ehn managed development of the first automated pepper harvester and led a year-round harvest organization in vegetables. Ehn holds a B.S. in Agriculture Engineering from Cal Poly, SLO.

Session:

- Career Panel (Subdiscipline: Electrical/Computer)

Candice Engler



- President, ASABE
- Board of Trustee, ASABE
- Farmer and President Johnson Bros of Ankeny (Ankeny, Iowa)
- Former Manager, Customer Support Engineering, John Deere

In 2001, Candi began as an intern at John Deere Des Moines Works. After earning a B.S. in Agricultural Engineering from Oklahoma State Univ., she worked in manufacturing, quality, product verification and validation, and systems engineering. In 2012, she earned an M.S. in engineering and management from the Massachusetts Institute of Tech (MIT). Candi recently transitioned to farm full-time on the family corn and soybean farm. Active in ASABE since 2000, Engler was Int'l Preprofessional Council (IPC, now ISB) president and Young Professional Community (YPC) chair. She won the AGCO Student Design Competition and is a recipient of the Yoerger Preprofessional Engineer of the Year award and 2 Presidential citations. She was recognized as a New Face in Engineering. She still supports ISB and YPC, serving on student competition and scholarship committees, earning a Friend of the YPC award. As an ASABE Trustee (2014-2017), she was on the Website Usability task force that resulted in a plan of short- and long-term changes to meet member and public needs.

Session:

- ASABE Leadership Panelist
- Industry/Farm Tour Speaker (Area Corn and Soybean Farming)

Kevin George



- Undergrad (Senior), Cal Poly San Luis Obispo, BioResource & Agricultural Engineering Department

Lynn Groundwater-Moeller, P.E.



- Chair, ASABE CA/NV Section
- Senior Engineer, Provost & Pritchard Consulting Group

Kevin is a 4th year BioResources and Agricultural Engineering (BRAE) major at Cal Poly SLO from Folsom, CA. I chose BRAE for 3 reasons: hands-on learning, community, and interdisciplinary exposure. In the BRAE department, he has pursued interests in different aspects of engineering such as water resources, alternative agriculture (hydroponics/aquaponics), machinery design, sensors/PLCs, and more. His career goals are to become a licensed engineer, focusing on water resources. He is involved with GrowCrew, a club in the BRAE department which encourages student projects related to bioresources and alternative agriculture. The main project for the past couple of years has been growing herbs using aeroponics, hydroponics, and aquaponics systems, with the guidance Dr. Kuwahara and Dr. Schwartz. Outside of class, he enjoys the Central Coast, whether taking a trip downtown for a cup of coffee at Linnaea's, going to the beach, or taking a hike down one of the many trails.

Session:

- Undergraduate Student Panelist

Lynn Groundwater-Moeller is an Associate Engineer with Provost & Pritchard in Clovis (since 2015) with experience in ag and civil engineering. She worked on SGMA projects including Basin Boundary Mods, Groundwater Sustainability Plans, feasibility studies, water well projects, and water resources designs. Lynn earned her B.S. in BioResources and Agricultural Engineering from Cal Poly, SLO and her M.S. in Civil and Environmental Engineering from Stanford Univ. Lynn has two PEs in Civil and Ag Engineering. Named the 2018 CA/NV Engineer of the Year, she is now CA/NV Section Chair. Named Groundwater, a career in the water industry is natural. Outside of work, Lynn camps, hikes, and travels (New Zealand honeymoon) with her husband, Kyle. They have a small farm with a cat, dog, 2 turtles, and 3 horses.

Session:

- ASABE Leadership Panelist

[Dr. Bob Gustafson, P.E.](#)



- Professor Emeritus; The Ohio State University; Food, Agricultural, and Biological Engineering Department

[Dr. Matt Haberland](#)



- Faculty, Cal Poly San Luis Obispo, BioResource & Agricultural Department

Bob has previously served at Ohio State as Director of the Engineering Education Innovation Center (2008-2016), Associate Dean for Undergraduate Education and Student Services in Engineering (1999-2008), and Department Chair of Food, Agricultural, and Biological Engineering Department (1987-1999). After being awarded his B.S. and M.S. in Agricultural Engineering from the Univ. of Illinois in 1971 and 1972 and PhD Degree from Michigan State Univ. in 1974, he joined the faculty of the Agricultural Engineering Department at the Univ. of Minnesota where he served until 1987. Dr. Gustafson's scholarship included work in grain quality as affected by drying and storage, finite element modeling, and electrical power applications in agriculture. He has authored the textbook Fundamentals of Electricity for Agriculture. He is a Fellow and Past President of ASABE.

Session:

- Engineering Ethics Speaker

Matt is an Asst. Prof. in the BioResources and Agricultural Engineering Department at Cal Poly, SLO. Before the Fall 2018, he was an Asst. Adjunct Prof. in the UCLA Dept. of Math where he taught computer programming languages including C++, Java, and Python. His primary research interests lie in swarm robotics for agriculture, but he is currently active in a variety of other projects including ego-activity classification of body-worn video, control of legged robots, and development of the optimization submodule for the Python scientific computing library SciPy. He earned a Ph.D. in Mechanical Engineering at MIT in 2014 for his thesis "Extracting Principles from Biology for Application to Running Robots", and previously created the Contact Sensor / Stabilizer for the rock drill of the Mars rover Curiosity. Dr. Haberland has received several honors for teaching, including the Distinguished Teaching Award from the UCLA Math department in 2017 and has published research in journals including IEEE Robotics and Automation Letters, Bioinspiration and Biomimetics, and Robotica.

Session:

- Graduate Student Panel (Ph.D. from MIT)

[Dr. Charles Hillyer](#)



- Director, Center for Irrigation Technology, CSU Fresno (Fresno, California)

Charles Hillyer joined the Center for Irrigation Technology at California State Univ., Fresno as Director in October of 2019. Prior to joining CIT, Charles has worked at a small startup company, Texas A&M AgriLife Extension, Oregon State Univ., and Mississippi State Univ. Charles' focus on irrigation management and technology began when he joined Dr. Marshall English's research team at Oregon State Univ. as a graduate student in 2004. Since then, Charles has worked on various irrigation topics including deficit irrigation management, variable rate irrigation, data exchange, and standards development. He is active in several professional societies including ASABE, the Irrigation Association, and AgGateway. Charles is the current head of the US delegation to the ISO TC23/SC18 committee on irrigation equipment.

Session:

- Career Panel (Subdiscipline: Water/Irrigation)

[Brian Huenink, M.S.](#)



- Senior Staff Engineer, John Deere (Waterloo, Iowa)

Brian joined John Deere in 2003 as a wheel, hitch, and tire group design engineer at Waterloo PEC (Product Engineering Center). After progressing through factory liaison roles on the 8000 and 7000 assembly lines, he came back to PEC and was responsible for the structural design of the 7R tractor, continuing to redesign the intake and exhaust for increased power while meeting Final Tier 4 emissions regulations. Later, he completed a mid-program redesign of the 9R Final Tier 4 exhaust system. Then Brian served on the product design team for future tractors as a staff engineer for hood enclosures, industrial design language coordinator, and system engineer for tractor lighting. In early 2019, Brian became the technical lead for Operator Station Core Technology, focusing on common module proliferation, new project development, and innovation. Brian believes strongly in his responsibility to engage and inspire peers and students in Ag and Bio engineering. He has been involved in the ASABE Int'l 1/4 Scale Tractor Student Design Competition since its establishment in 1997. Brian earned a BS and MS in Agricultural Engineering from the Univ. of Wisconsin-Madison. His career has demonstrated his personal connection to ag, bringing a unique perspective of an equipment user to his designs. For 10 years, he has been a partner in his family dairy and certified seed farm in WI.

Session:

- Career Panel (Subdiscipline: Mechanical & Power)

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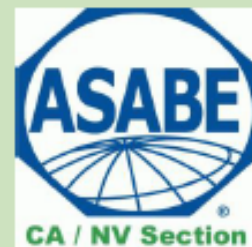
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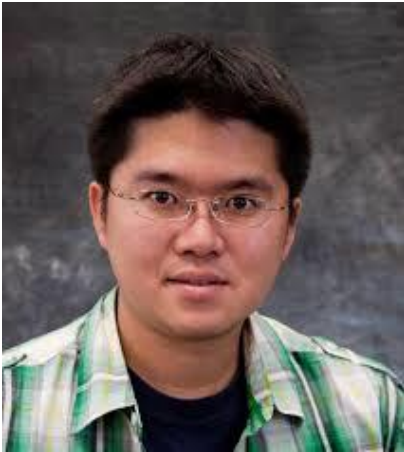
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IN KIND



Dr. Tien-Cheh Hung



- Director of [UC Davis Fish Conservation and Culture Laboratory](#) (Byron, California)
- Assistant Adjunct Faculty, UC Davis Biological & Agricultural Engineering Department

Sherry Hunt, Ph.D.



- Technical Committee Leader, ASABE
- Acting Location Coordinator, USDA Agricultural Research Service

Prof. Hung works in aquacultural engineering including computational fluid dynamics, biomimetic particle filtration system design, recirculating culture system design, cultural technique development, and fish behavior. He has been working with the endangered Delta Smelt since 2008 and is Director of the Fish Conservation and Culture Laboratory (<https://fccl.ucdavis.edu/>) and manages the refuge population of the Delta Smelt. His current study is focusing on the behavior of Delta Smelt at various environment, culture technique improvement, fish marking, and the effect of domestication on the captive fish. In addition, Dr. Hung's experience in R&D at a chemical pesticide company responsible for the formula and formulation design.

Session:

- Industry/Farm Tour Speaker (Area: Aquaculture)

Dr. Hunt is the Research Leader and Acting Location Coordinator of the USDA ARS Hydraulic Engineering Research Unit (HERU) in Stillwater, OK. She is internationally recognized in modeling of hydraulic structures and embankment breach with expertise in stepped spillway designs in US and Europe. With USDA NRCS, KSU, and others, she developed WinDAM for predicting breach and failure of earth embankments. Adopted by USDA NRCS, US BOR, and US ACE, it has prioritized dams and levees for rehab, saving billions (\$). A 24-year ASABE member, she is on the Foundation Board of Trustees (BOT), Finance Comm., and Meetings Council. She was on the ASABE BOT and served as the first AIM program chair. She is co-chair of the Nat'l Dam Safety Review Board Research Work Group and a member of a dam safety adv. comm. for the US Depts. of State and Treasury. She was awarded ASABE Fellow (2019), 3 USDA NRCS Citations of Appreciation, the ASABE Gunlogson Countryside Engineering award, the ASABE Holloway Prof. Dev. award, 3 ASABE Presidential citations, an ASABE Superior Paper award, and the Asso. of State Dam Safety Officials Hampton Medal. She is in 4 honor societies including Alpha Epsilon.

Session:

- ASABE Leadership Panel

Taylor Hunt



- Vice President, Student Rally Executive Committee
- Undergrad (Junior), Modesto JC and Washington State U. Biosystems Engineering Dept.

Carolyn M. Jones, P.E.



- Career Development Chair, ASABE CA/NV Section
- Agricultural Engineer
USDA Natural Resources Conservation Service
Bay/Delta Team

Taylor Hunt is a California central valley native. Born in Modesto, CA she spent two years at MJC in the Ag Business and Mechanized Agriculture program and recently transferred, albeit online, to Washington State University where she is studying Agricultural Technology and Production Management.

Sessions:

- Welcome remarks
- Undergraduate Student Panel
- Graduate Student Panel Moderator
- Industry/Farm Tour Moderator

Carolyn earned a BS in Biosystems Engineering from UC Davis in 2001 where she spent two years as a live-in caretaker at the Animal Science Horse Barn. In 2000, Carolyn interned for the USDA Natural Resources Conservation Service (NRCS) in the Dixon Field Office. After graduation, she joined NRCS at the State Office. Her design projects have varied from irrigation and tailwater return to dairy manure management to stream and wetland restoration to small pond design and design/computation tool development. In 2004, Carolyn obtained her Civil Engineering Professional Engineering (PE) license. She transferred to the Napa Field Office in 2006 and has been working with landowners and partnering agencies on erosion control, storm water conveyance, livestock water systems, irrigation water management, and stream restoration design projects. In 2007, she earned her Agricultural Engineering PE license and is proud to be double-registered, including in the field of her passion – agriculture! In January 2012, Carolyn was promoted to the Bay/Delta Team Engineer and serves 8 counties. Carolyn served as Acting State Conservation Engineer for 4 months in 2017. Carolyn was a 2009-2011 ASABE Trustee, was the 2010-2012 Chair of ASABE's Professional Engineers Institute, has been active in the CA/NV Section since 2001, and participates on a number of Natural Resources and Environmental Systems (NRES) technical committees. She's served on the UCD BAE Advisory Board since 2012.

Sessions:

- ASABE Leadership Panel Moderator
- Engineering Licensure Panel Moderator
- Engineering Ethics Moderator

Andy Lenkaitis, M.S.



- Farmer, Lenkaitis Dairy (St. Charles, IL)
- Environmental Systems Engineer, GEA Farm Technologies, Inc.

Dr. Peter Livingston, P.E.



- Regional Adviser, Student Rally Committee
- Head, Cal Poly San Luis Obispo BioResource and Agricultural Engineering Dept.
- Principal, Bosque Engineering, LLC.

Andy and his wife Sarah help run the Lenkaitis family dairy farm (LenkaitisHolsteins.com) started in 1983 with 5 animals. Today, it is home to 160 Red and White Holstein cattle and is enjoyed by 3 generations (Albert and Mary Etta's 4 children and 11 grandchildren). They grow feed crops and sell manure to locally as fertilizer. Andy and Sarah began farming with Andy's parents in 2014. By 2018, a new barn was built and equipped with the technologies like robotic milkers, cow brushes, an automated manure system, and herd health management software. Proud of what they do, the barn doors are open for tours so folks can learn about the people and dairy cows behind the nutritious milk and dairy foods we enjoy.

Sessions:

- Industry/Farm Tour Speaker (Area: Dairy Farming)

Dr. Peter A. Livingston is the Cal Poly BioResources & Agricultural Engineering (BRAE) Department Head. He came to San Luis Obispo from University of Arizona, Tucson, where he was Associate Professor of Practice in the Agricultural and Biosystems Engineering Department. Peter has >35 years of professional experience in agricultural and water resources engineering, as well as natural resources planning, holding a B.S. from University of Arizona, M.S. from Colorado State University, and Ph.D. from University of Arizona. Peter has worked for a large international consulting firm, an Indian Nation, and started two firms, leaving the first to finish his Ph.D., and started Bosque Engineering to use his experience in agricultural design. Dr. Livingston brings experience in attracting industry projects/funds to, as well as mentoring, Senior Design Projects. He also has experience securing USDA grants for research and inter department and university research experience, looking forward to working with centers and departments on campus and with other universities. Peter is a commissioner for the Accreditation Board for Engineering and Technology (ABET). With his wife, Sue, he raises various exotic animals and brought the alpacas to CA.

Sessions:

- Welcome remarks
- Order of the Engineer Moderator
- Engineering Ethics Moderator
- Closing remarks

Gilber Miito, M.S.



- Acting President, ASABE International Student Branch
- Ph.D. Candidate, Washington State University Biosystems Engineering Department

Sonia Maassel Jacobsen, P.E.



- Adjunct Faculty, University of Minnesota Bioproducts and Biosystems Engineering Department

Gilbert is originally from Uganda and a Ph.D. candidate in Biological Systems Engineering at Washington State Univ. His research focus is on nutrient management at dairy farms. He is the current President of ASABE Int'l Student Branch (ISB) that brings together all Pre-professionals and Students in Agricultural, Biological, and Food Engineering. It is also the umbrella branch for all student chapters. He was the Secretary of the WSU ASABE Student chapter.

Sessions:

- ASABE Leadership Panelist

A 41-year member of ASABE, Sonia Maassel Jacobsen had the honor of serving as the first female President in 2011-2012. She continues to be active, leading the preparation of a supplied reference handbook (SRH) and serving on the exam development committee for the Ag. & Biological Engineering PE exam. After 35 years of distinguished federal service with USDA NRCS, Jacobsen is now adjunct faculty at the University of Minnesota in the Bioproducts & Biosystems Engineering Department. Jacobsen served 8 years on the Board in Minnesota that licenses PEs. As an emeritus member of the National Council of Examiners for Engineering and Surveying (NCEES), she has served for 4 years on the Examinations for Professional Engineers (EPE) committee of NCEES; the committee oversees the preparation and administration of the PE and FE exams. In 2003, Jacobsen became an ABET volunteer, assisting with accreditation reviews at universities in the US and abroad for biological and agricultural engineering programs. Jacobsen obtained her BS degree in Agricultural Engineering from the Univ. of Minnesota in 1978 and her Masters degree from the Univ. of Illinois in 1980 in Civil Engineering - Water Resources. Her professional emphasis includes wetland hydrology, drainage water management, hydrology, and water resources management.

Sessions:

[Dr. Bryan Jenkins](#)



- Chair, UC Davis Biological and Agricultural Engineering Department

[Dr. Dana Porter, P.E.](#)



- EOPD-412 Professional Ethics Chair, ASABE
- Associate Head, Texas A&M University, Biological and Agricultural Engineering Dept.

- Engineering Licensure Speaker

Dr. Bryan Jenkins teaches and conducts research in the areas of energy and power, with emphasis on biomass and other renewable resources. He has more than thirty years of experience working in the area of biomass thermochemical conversion including combustion, gasification, and pyrolysis. His research also includes analysis and optimization of energy systems. He teaches both graduate and undergraduate courses on energy systems, heat and mass transfer, solar energy, and power and energy conversion, including renewable energy and fuels, combined heat and power systems, economic analysis, and environmental impacts. Prof. Jenkins is a recipient of an Outstanding Achievement Award from the U.S. Department of Energy for exceptional contributions to the development of bioenergy, and the Linneborn Prize from the European Union for outstanding contributions to the development of energy from biomass. He is a Fellow of the American Society of Agricultural and Biological Engineers (ASABE).

Sessions:

- Engineering Ethics Moderator

Dana Porter, Ph.D., P.E., is a licensed PE and chair of the ASABE Engineering Ethics Committee. She serves on the ASABE Engineering Licensure Committee, Nominating Committee, Foundation Board of Trustees, Extension Engineering Committee, and numerous technical committees. Dana is a Professor, Extension Program Specialist, and Associate Department Head for the Department of Biological and Agricultural Engineering (BAE) at Texas A&M AgriLife Research and Extension Service. She provides program leadership for the BAE Extension unit and engineering leadership for her integrated applied research and extension program in agricultural water management and agricultural irrigation. Dana's research and extension program, based at Lubbock, Texas, develops, adapts and evaluates technologies and practices that support water conservation and mitigate impacts of limited (and declining) water quantity and quality, while supporting sustainability and profitability of agricultural production systems. Limited and declining well capacities in the Ogallala Aquifer, increasing salinity issues, increasing regulatory and related constraints, recent and recurring droughts, and other challenges, as well as new and promising technologies, offer a great variety of opportunities to serve the agricultural and research communities.

Sessions:

Dr. Mohammed Sadek



- Program Chair, ASABE CA/NV Section
- Faculty, Cal Poly San Luis Obispo BioResource and Agricultural Engineering Department

Brandon Smith, P.E.



- Engineering Manager, Sierra Nevada Brewing Company

- Engineering Ethics Moderator

Dr. Mohammad Sadek is an Assistant Professor in the BioResource and Agricultural Engineering (BRAE) Department at Cal Poly State University. His area of expertise is agricultural machinery systems and automation. With a mechanically inclined background, Dr. Sadek believes that the wheel is one of the greatest inventions of all time. The rotational motion has solved many problems in the world. To upkeep his believe, he is also moving around the world. He has traveled and lived in many countries around the globe. Dr. Sadek is originally from Bangladesh. After receiving his Bachelor's degree in Agricultural Engineering from Bangladesh, he moved to Thailand for his master's degree. Prior to start at Cal Poly, he lived in Canada, where he earned his doctorate degree and worked several years in Buhler Industries Inc. as a new product development engineer. Finding cheaper solutions for a problem brought him to the engineering field. He loves to call him poor man's engineer. As an engineer, Dr. Sadek enjoys building games and toys using engineering principles. In his free time, he likes to move, I mean travel with his family. His favorite places have been the Great Wall of China and Banff in Alberta, Canada. His goal is to keep travelling and fulfill his dream of a world tour. He also enjoys cooking, loves to make his fusion recipes.

Session:

- Order of the Engineer Moderator

Brandon Smith is Engineering Manager at the Sierra Nevada Brewing Co. flagship brewery in Chico, CA. A chemical engineer by training and 1995 graduate of Georgia Tech, Brandon began his career in the environmental and industrial wastewater treatment business in Georgia, where he first obtained his PE license. In 2007, Brandon and his family moved to Alaska so he could in the brewing industry at Alaskan Brewing Co. In 2013, Brandon moved to Sierra Nevada, where he currently serves as Engineering Manager, managing the Process Engineering, Reliability, Automation, and Plant Utilities teams. Brandon currently holds a PE license in CA and a Diploma in Brewing from the Institute of Brewing & Distilling and is a BJCP Certified Beer Judge. His favorite beer is Pale Ale.

Session:

- Sierra Nevada Brewing Company Tour Speaker

[Kathryn Tarver](#)



- Undergraduate (Senior), UC Davis Biosystems Engineering Student
- Founder, UC Davis Women's Machinists' Club
- Intern, Monarch Tractor

[Keith Tinsey](#)



- Director of Operations, Black Gold Farms (Sturgis, Michigan)

Kathryn is a 4th year Biological Systems Engineering major at UC Davis. She is the founder of the UC Davis Women Machinists' Club, the first collegiate organization dedicated to making fabrication experience more accessible to people of all genders. Kathryn is a Regents Scholar, a member of the UC Davis University Honors Program, and a Construction Lead of the Bolivia Team of UC Davis Engineers Without Borders (EWB) organization. She currently interns at Monarch Tractor, a Bay Area startup developing the world's first electric, driver-optional tractor. In her spare time, Kathryn likes to listen to podcasts, read, write, salsa dance, and play with her corgi puppy.

Sessions:

- Undergraduate Student Panelist

Keith began in 1985 as an Ag Engineering student at Michigan State Univ. (MSU). He joined a USDA potato storage project team, crediting his later success to colleagues in MSU's Dept of Ag Engineering who turned an eager farm kid into a PE. Tinsey earned an MS in Bio and Ag engineering (minor in electrical and computer) from North Carolina State Univ. He served as director of the MI Ag Electric Council and as an engineering capstone design instructor at MSU. He holds 1 patent and an ASABE AE50 award. In early 2020, Tinsey joined Black Gold Farms as Director of Operations for the national potato and sweet potato supplier for consumers and for chip and french fry processors. He joined ASABE in 1987 while a MSU student. After a 1991 ASABE career fair interview, he began working at J-Star, a farmstead equipment manufacturer. His manager, ASABE member Larry Johnson, encouraged Tinsey to stay an ASABE member for personal growth and business purposes through work on standards. Tinsey has served on committees and in leadership roles, including the Board of Trustees, ASABE Foundation, PEI (chair), and as Director of Standards. He is active with the Michigan Section and assists with Fountain Wars at AIM.

Sessions:

- Industry/Farm Tours Speaker (Area: Potato/Sweet Potato Farming and Chip Potato Production)

Rose Trulin



- Tour Coordinator, Sierra Nevada Brewing Company

Luis Villanueva



- Treasurer, Student Rally Executive Committee
- Undergrad (Junior), Cal Poly San Luis Obispo BioResource and Agricultural Engineering Department

Bio not available.

Sessions:

- Sierra Nevada Brewing Co Tour Speaker

A 3rd year BRAE student from Davis, CA, Luis is involved in clubs such as the Ag Engineer Society (AES), Tractor Pull, and Int'l 1/4 Scale (IQS) Tractor Student Design Team. He is President of Construction for 1/4 IQS Team, Bleachers and Stairs Committee Chair for the Tractor Pull Club, and an officer in AES. He was elected as the treasurer for the 2021 CA/NV ASABE Section Rally Committee. Summer 2020, Luis interned with the Yolo County Flood Control and Water Conservation District working with two BRAE alumni on SCADA projects and recording flow measurements on pumps and canals in and around Yolo County. He also traveled with the Tractor Pull Team throughout the state and earned the opportunity to drive Mustang Legacy, one of the Tractor Pull tractors for the first time.

Sessions:

- Undergraduate Student Panelist

[Sara Weyer, E.I.T.](#)



- Master Student, Iowa State University Biological Engineering Department

Sara is a 2nd year M.S. student in Agricultural and Biosystems Engineering at Iowa State Univ. (ISU). She attended ISU for her B.S. Growing up in Southern Indiana on a beef cattle and sheep operation and working on turkey and dairy farms led her to an area of study in Animal Production Systems Engineering. Most of her research focuses on mass mortality management strategies for swine with additional interests in structures and ventilation research. Within ASABE, she served as president of ISU's student chapter, as well as serving on the International Student Branch (ISB) officer team, and currently holds a position in the Young Professionals Community (YPC) as the graduate student representative.

Sessions:

- Graduate Student Panelist

[Dr. Steve Zicari, P.E.](#)



- Industry/Student Liaison, ASABE CA/NV Section
- Chief Technology Officer, California Safe Soils, LLC.

Steve is Chief Technology Officer at California Safe Soil, LLC, a company based near Sacramento, CA where they convert organic food- and agricultural-byproducts into fertilizers, feeds, and other bioproducts. He earned my PhD in Biosystems Engineering at UC Davis and MS/BS degrees in Agricultural and Biological Engineering from Cornell University. Steve is a practicing Professional Engineer in Ag. and Bio. Engineering, and he became an engineer to implement innovative solutions to improve resource-use efficiencies so that we can sustainably feed and fuel our growing population. In his free time, Steve enjoys spending time with his wife and two kids travelling, skiing, and eating yummy food!

Sessions:

- Career Panel Moderator

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