



**California/Nevada Section  
Bimonthly Update  
July 2018  
Seventy-Fifth Edition**

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❖ [Remembering Joe Glass](#)

Published in *Inside ASABE*, June issue:



Larry "Joe" Glass died February 6, 2018, at the age of 79. He was born in 1938, to Wilmer and Hilda Glass in Tipton, Ind.

Joe—as he was known by everyone—received his bachelor of science degree at Purdue University, then continued to earn a master of science and doctorate degrees at Texas A & M. Glass was professor of agricultural engineering at Cal Poly San Luis Obispo and Texas A&M for a total of 40 years. He was an active member ASABE and served as advisor to the International Pre professional Council officers for many years.

Glass took several trips to India to consult with agriculture professionals on wells, pumps, and irrigation methods that would help sustain water resources for communities in need. He loved advising his students and helping them succeed. Joe retired from Cal Poly Professor Emeriti in 2001. After retirement, Joe and his wife Patti participated in ministries and community service in Carmel, Monterey, Pacific Grove, and Oakhurst. They also traveled throughout the USA, and the world, for ministry projects: building schools, churches, helping orphanages, and community needs. Joe was well-known for his Bible memorization, evangelistic efforts, and compassion to help those in need, especially children.

He is survived by his wife, Patti; brothers: Harold and James Glass; sister, Jane Ann Tucker; children: Warren Glass, Jamie Corr, Cari Mueller, Jonathan Glass, and Beth Vengley; stepchildren: Marc Huth, Laura Gothard, and Scott Huth; 21 grandchildren; and 6 great-grand-children. Interment at Oakhill Cemetery, Oakhurst, CA.

Glass was a 41-year member of ASABE.

❖ [Cal Poly San Luis Obispo Update](#)

**Cal Poly Quarterscale Competition**

From May 31<sup>st</sup>-June 3<sup>rd</sup> the Cal Poly Quarterscale team competed at the IQS design competition where they put the tractor they had been building throughout the year to the test. These tests consisted of a technical inspection, durability, maneuverability, and tractor pulls.

The team was also judged on a presentation of the overall design and build. Many new concepts were built into the tractor this year which gave the team a few problems throughout the competition. Even with these minor setbacks, the team passed technical inspection and competed in all the other events. The team has begun design for next year's tractor based off ideas from the previous years as well as new ones that will be incorporated next year.



### Cal Poly Tractor Pull



The Cal Poly Tractor Pull summer season is officially underway with quite the busy schedule this summer. The team will have competed in over twenty pulls throughout the summer with their two tractors Mustang Legacy and Poly Thunder. Since the end of school on June 15<sup>th</sup>, the tractor has been to Stockton, Eureka, Willits, and most recently Sonora. Engine work is also being done on Poly Thunder after a backfire at the beginning of June. The tractor will hopefully be able to compete again towards the end of the season. The team is also currently looking to improve the fuel system on Mustang Legacy to increase the distance that the tractor will be able to pull the sled.

### AgBot Update

Cal Poly's AgBot team competed from May 17<sup>th</sup>-19<sup>th</sup> in Rockville, Indiana in the AgBot competition. The team designed and built a watermelon harvester that would determine if a watermelon was ready to be picked. The harvester had to be fully-autonomous for the competition. With competition being a far distance away, the team had to ship the harvester in pieces and then re-assemble it once it arrived. They experienced minor setbacks with one of their linear actuators which prevented the harvester from being fully autonomous but their presentation and overall design still earned them a third place finish. The AgBot team looks forward to next year's competition in either the weed and feed, or the soil sample competition.



### PAAC Update

PAAC has been working hard to complete the robot that they will be bringing to the ASABE national conference in Detroit this summer. The robot was designed to replicate a harvester that will detect when fruit is ready to be picked and pick it if this is the case. This robot is obviously not full sized, but the electronics used can potentially be scaled up for a more practical usage.

## End of Year AES Banquet

On May 19<sup>th</sup>, the Cal Poly Agricultural Engineering Society (AES) hosted its annual end of the year banquet to wrap up the year and welcome in the new team of officers. The event is mainly designed to recognize students for their achievements throughout the school year. Thanks to many generous donations from industry and the AES club, over sixty scholarships were given out at the banquet. Although the scholarship value does help students with tuition for the following year, the main purpose is to recognize those who went above and beyond to make the AES club and BRAE department the best place to be. It is always great to see students, their families, and professors come together to celebrate the end of the year.

## ❖ University of California, Davis Update

### Pan Lab receives Research and Development Award at IFT Conference



**(Photo)** Members of the Pan Lab at UC Davis

The Institute of Food Technologists (IFT) named The Innovative Infrared Research and Development Team, the recipient of the 2018 [Research and Development Award](#) for its contributions and accomplishments in innovative research and development and commercial implementation of sustainable infrared heating technologies for improved food healthfulness, quality, and safety while saving energy and water during food processing.

The research team comprises of BAE Faculty member, Dr. Zhongli Pan and members of his research group: Tara H. McHugh, Chandrasekar Venkitasamy, Ragab Gebreil, and Hamed M. El-Mashad. The team received the award while attending this year's annual IFT conference in Chicago, Ill, July 15-18<sup>th</sup>.

### Professor Emeritus Paul Singh receives honorary degree from University of Guelph



**(Photo)** Dr. Singh receives honorary degree from University of Guelph.

Dr. Paul Singh, Professor Emeritus of BAE, was given an honorary Doctor of Science degree from the University of Guelph, Ontario, Canada. Dr. Singh travelled in person in early June to give the convocation address at the University's commencement ceremonies.

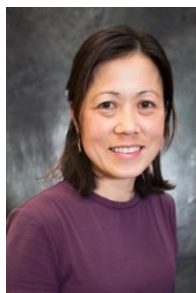
The following links are videos of the ceremony:

[Conferment of Doctor of Science, \*honoris causa\* Convocation address](#)

## BAE hiring Assistant Professor of Crop Sensing and Automation, apply by Aug 1<sup>st</sup>, 2018

The Departments of Viticulture and Enology and Biological and Agricultural Engineering in the College of Agricultural and Environmental Sciences at the University of California, Davis are jointly recruiting an Assistant Professor specializing in the area of sensing, modeling and automation in agricultural systems with an emphasis on grapevines and vineyard management. A PhD in engineering or a related field is desired. In addition to teaching, this academic year (9-month), tenure track, Assistant Professor position includes an appointment in the Agricultural Experiment Station (AES). More information about this position may be found on the [BAE department website](#).

### Dr. Tina Jeoh awarded DOE grant



Professor Tina Jeoh, faculty in the BAE department, was recently awarded a \$1.5 million grant to work on a project titled, *Development of broadband infrared nano-spectroscopy of biological materials in fluid*. This grant will span over three years and comes from the Office of Biological and Environmental Research (BER) in the Office of Science of the U.S. Department of Energy. The grant was made available through a program called “Bioenergy Research for Bioenergy.” Dr. Jeoh’s project is in collaboration with Dr. Hoi-Ying Holman who leads LBNL’s Berkeley Synchrotron Infrared Structural Biology (BSISB) Imaging Program.

This research aims to solve two major challenges –the mechanisms of cellulose hydrolysis by cellulases and the lack of label-free, nanometer scale and time-resolved imaging technique to study surface reactions in aqueous biological reactions. Elucidating how cellulases hydrolyze cellulosic substrates is a game-changer for the success of cellulosic biofuels and bioproducts. As the enzyme-catalyzed reactions occur at the surface of poorly characterized and complex plant cell wall matrices, the lack of means to map surface chemistry of the substrates in situ has severely hampered research progress. The development of a method that can map surface chemistry at the nanoscale over time in an aqueous reaction is a game changer not only for the study of cellulose hydrolysis reactions, but also for the study of any heterogeneous biological reaction. Thus, the goals of this research project are to overcome technological limitations to conducting detailed studies of surface reactions in aqueous biological systems with high spatial, chemical and time resolution, and to apply this method towards solving the mechanisms of enzymatic hydrolysis of cellulosic biomass.

### Boundy-Mills (FST), Jeoh (BAE), and Hernes (LAWR) receive USDA-AFRI bioproduct grant



**(Photo) Left to right:** Tina Jeoh, Kyria Boundy-Mills, and Peter Hernes

Kyria Boundy-Mills (Food Science and Technology), Tina Jeoh (Biological and Agricultural Engineering) and Peter Hernes (Land, Air and Water Resources) received a \$500,000, 2-year award from USDA-AFRI Sustainable Bioenergy and Bioproducts challenge area. The objectives of this funding program are to develop novel technologies to convert the lignin or nanocellulose fractions of lignocellulose to value-added materials. This project takes advantage of highly specialized UC Davis expertise in

lignocellulose processing, lignin analysis, and the 1,000+ yeast species available for research in the Phaff Yeast Culture Collection.

The team is working with several stakeholders who are providing agricultural and food processing residues including sorghum, wheat germ and bran, and almond shells, hulls and prunings. Tina Jeoh's lab will develop methods to fractionate the plant materials into a soluble stream containing lignin monomers and hemicellulose sugars that yeasts can consume. Additionally, the Jeoh Lab will utilize the insoluble nanocellulose fraction to further advance a UC Davis patented microencapsulation technology. Peter Hernes' lab will focus on depolymerizing the lignin fraction and identifying the lignin monomers and oligomers. Kyria Boundy-Mills' lab will identify yeasts that can consume the sugars and lignin monomers in the processed plant material, and produce valuable products: oils and glycolipids. Yeast oils have potential for use as fuels, chemicals, and food and feed ingredients, and the glycolipids are natural surfactants with detergent, emulsifier, and anti-foam activity.

### **Gail Bornhorst Co-director of new UC Davis Center for Deglutology and Digestion**



**(Photo) Left to right:** Chef Ken Frank, Gail Bornhorst PhD, Stanley Marks BVSc PhD, and Peter Belafsky MD PhD at the Center for Deglutology and Digestion Grand Opening.

Professor Gail Bornhorst, faculty member in the Department of Biological & Agricultural Engineering and Department Food Science & Technology, has teamed up with faculty from the Departments of Otolaryngology in the School of Medicine (Dr. Peter Belafsky) as well as from the Department of Medicine and Epidemiology of the School of Veterinary Medicine (Dr. Stanley Marks) to open a new Center for Deglutology and Digestion (CDAD). This center is dedicated to studying disorders of swallowing, digestion, and nutrition. Dr. Belafsky will act as the Medical Director while Dr. Bornhorst will act as the Director for CDAD.

The Center's grand opening was marked by a reception and presentation from its founding members on April 9<sup>th</sup>, 2018. Read about Center announcement on the [UC Davis website](#).

### **BAE Picnic Day Float receives Parade Marshal's Choice Award**

The 104<sup>th</sup> annual Picnic Day Event took place on April 21<sup>st</sup>, 2018 and for the second year in a row the UC Davis BAE department won an award for its float entry in the Picnic Day Parade. Last year, BAE's entry, *Growing Together*, won the Best Theme Representation. This year's entry, themed *Where the Sun Shines* won the Parade Marshals' Choice Award.

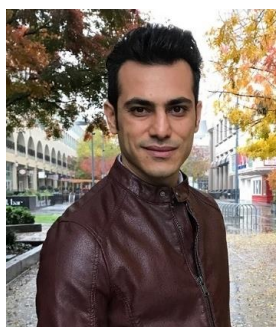
In addition to the Parade, Picnic Day is an opportunity to celebrate UC Davis with fun games and activities all across campus. Members of the public have an opportunity to visit different departments to see the activities and research conducted at UC Davis. The BAE department held its own open house in 1330 Bainer Hall with different labs presenting posters and displays of their work.

More information about the Picnic Day Parade and BAE Award on the [BAE website](#) and in the [Davis Enterprise](#).



(Photo) Left, BAE department float; and Right, BAE department presents posters and samples to member of the public at the 104<sup>th</sup> annual UC Davis Picnic Day

### New BAE faculty, Alireza Pourreza, wins Sunkist Young Designer Award



Assistant Cooperative Extension Specialist, Alireza Pourreza has been selected to receive the Sunkist Young Designer Award that will be presented during the ASABE Annual meeting in Detroit in July. Established in 1972, this award recognizes and honors members under 40 years of age (on July 1 of the year in which the award is presented), for outstanding contributions to the advancement of the profession and to stimulate professional achievement. Sponsored by Sunkist Growers, Inc., the Sunkist Young Designer Award specifically honors the development of a technical plan that influences agricultural engineering progress, as evidenced by use in the field.

Dr. Pourreza's contributions have included development of the polarized imaging technique: a method to detect accumulation of starch in citrus leaf as an early indication of citrus greening disease or Huanglongbing (HLB); and development of Virtual Orchard: a 3-dimensional reconstruction of orchards using aerial imagery and photogrammetry that can be used to extract precise tree geometric information such as canopy area, height, and volume.

Dr. Pourreza explains why these accomplishments are important and valuable to agricultural engineering and to society in general:

“(1) The polarized imaging technique was primarily used for early Citrus Greening detection, that is a major disease of citrus with no known cure. Early detection of Citrus Greening is important because growers can prevent further spread of the disease before the entire orchard get infected. The polarized imaging technique can also be used in other applications that involve the detection of starch or sugar. (2) Knowledge about tree geometry such as individual canopy cover, volume, height, and density is important for growers to understand variability within their orchard and make timely decisions about irrigation, nutrient, pest and disease etc. Virtual Orchard is an affordable technology that makes this

information accessible for growers. Information extracted from the Virtual Orchard can be used to apply variable rate inputs in a site-specific manner according to the prescription maps that identify the application rate at different locations of an orchard.”

### **Jean VanderGheynst selected for HERS Institute for Women STEM Leadership Program**



**(Photo)** Executive Associate Dean Jean VanderGheynst (Photographer: Lucy Knowles/UC Davis)

Higher Education Resource Services (HERS) has announced that Jean VanderGheynst, executive associate dean of research and graduate studies at the UC Davis College of Engineering, was selected to attend the [2018 HERS Luce Program for Women in STEM Leadership](#) – an intensive, two-week residential program designed to prepare

women to assume senior leadership roles in higher education. The program is also designed to develop and promote structured peer and mentor connections for women in various stages of their STEM careers.

VanderGheynst is one of 65 women from across the United States who were selected to attend the Women in STEM Leadership program, which is designed to help participants gain the knowledge, skills and perspectives needed to advance as leaders in academia. VanderGheynst is also one of just six women who received a Clare Booth Luce Scholarship. The scholarship provides full tuition, accommodations, meals and travel to and from the program.

“It is an honor for me to be selected for this prestigious program that aims to improve leadership opportunities for women in STEM,” VanderGheynst said.

In addition to her duties as associate dean for the College of Engineering, VanderGheynst is a professor of Biological and Agricultural engineering at UC Davis. She was previously the associate dean for undergraduate studies from 2009-2013 and served as interim dean of the college in 2015. More than \$9 million of her extramural funding at UC Davis has been in support of undergraduate and graduate student preparation in engineering. This includes a NSF GK-12 award to improve leadership, communication and collaboration skills, and teaching capabilities for engineering graduate students pursuing research in the areas of renewable energy, climate change and environmental sustainability.

Among her awards, VanderGheynst has received the [UC Davis Distinguished Postdoctoral Scholar Mentoring Award](#), the Farrall Young Educator Award from the American Society of Agricultural and Biological Engineering for excellence in teaching and the Outstanding Mentor Award from the UC Davis Consortium for Women and Research Advisory Board for mentoring women’s research.

The 2018 HERS Luce Program for Women in STEM Leadership program will take place at Bryn Mawr College, just outside of Philadelphia from July 9-21.

Read the original press release for this announcement [here](#).

## Tyler Barzee and Ferisca Putri join the ASABE CA-NV Officers Team

Tyler Barzee and Ferisca Putri from the UC Davis BAE department are the two newest members of the ASABE CA-NV Officers Team. Tyler is the new Public Relations officer while Ferisca is the new Industry/Student Liaison. They join two other BAE department members, Hossein Edalati who is the former Public Relations officer and new Vice Chair, and Professor Zhongli Pan who is the Membership Chair.



From left to right: Tyler Barzee (Public Relations) and Ferisca Putri (Industry/Student Liaison) join Dr. Zhongli Pan (Membership Chair) and Hossein Edalati (Vice Chair) as new UC Davis BAE members on the ASABE CA-NV Officer team.

[Tyler Barzee, MS](#) is a PhD Candidate in the Department of Biological and Agricultural Engineering at UC Davis. He received his BS in Biological Systems Engineering from Clemson University in 2014 and his MS from UC Davis in 2017. At Davis, he is advised by Professor Ruihong Zhang and most of his research focuses on the sustainable utilization of anaerobic digester effluent (digestate). He has worked on projects including: liquid and solid biofertilizer production from digestate, farm-scale evaluation of biofertilizer products in growing tomatoes and corn, pilot-scale microalgae cultivation on processed anaerobic digestates, evaluation of technologies for methane mitigation on dairy farms, and fungal bioflocculation of microalgae and bacteria.

[Ferisca Putri](#) is a second year Master's student at the University of CA, Davis in the Biological Systems Engineering program. She is working with Dr. Tien-Chien Hung and Dr. Heiner Lieth on projects related to soilless culture production and recirculating systems, specifically in citrus nursery production. Her area of expertise includes controlled environment agriculture, hydroponics and aquaponics, plant nursery production, water and waste water treatment, and algae production. She has a bachelor's degree in Agricultural and Biological Engineering with a focus on soil and water resources from University of Illinois at Urbana-Champaign.

Information about other members of the ASABE CA-NV Officers Team, including bios and contact information is available on the ASABE CA-NV website: <http://www.asabecanv.org/>

## Hossein Edalati wins graduate poster award at annual ASABE CA-NV meeting

Hossein Edalati won the first place in the graduate student poster prize competition at the annual ASABE CA-NV Meeting in Tulare, CA this past February. The poster's title is "The Effects of Solid-Liquid Separation on the Mitigation of Methane Emissions from Dairy Manure Lagoons".



This work is part of ongoing research conducted by the lab of Dr. Ruihong Zhang in the BAE Dept. at UC Davis, and is made possible by funding from the CDFA (grant#15-0610-SA). Its primary goal is to quantify the affect that different solid-liquid separation systems on CA Dairies have on the mitigation of methane emissions from long-term manure storage lagoons on the farms.

The dairy industry represents the largest financial player in California's agricultural sector, accounting for \$6.23bn out of a total of \$47.1bn in 2015. But dairies are also California's largest agricultural contributor to greenhouse gas emissions (4.8% of total statewide emissions). Emissions from manure storage lagoons on dairy farms contribute approximately 25% of all methane emissions in the State.

Solid-liquid separation technologies can reduce methane emissions from dairy lagoons by reducing the loading of volatile solids, which are otherwise converted to methane by methanogens under the anaerobic conditions. Examples of such technologies include mechanical separators, settling basins, and weeping walls. The objectives of this research were to: 1) evaluate the efficiency of different solid-liquid separation technologies on California dairies; and 2) quantify their efficacy in the reduction of methane production potential from dairy lagoons. This study is looking at separator systems on six different CA dairies across all four seasons and includes: four mechanical separators, one weeping wall, and one combination roller press and settling tank system.

Other researchers involved in the project include: Yike Chen (grad student, UCD BAE), Dr. Hamed El-Mashad (Research Scientist, UCD BAE), Dr. Xingjun Lin (Research Scientist, UCD BAE), Tyler Barzee (grad student, UCD BAE), Dr. Steve Zicari (former grad student, UCD BAE and Director Engr/R&D, CA Safe Soils), Steve Kaffka (Director, California Biomass Collaborative and Extension Specialist, UCD Plant Sciences Dept.), and Marsha Campbell (Farm Advisor, UC Cooperative Extension).

The winning poster can be found on the [UC Davis BAE website](#).

## ❖ Annual ASABE CA/NV Section 2018 Meeting Recap

We are almost 6 months away from our next annual meeting, but here is all the happenings from the last meeting and everything you missed.

### Meeting Summary

The annual ASABE California Nevada Section meeting took place on February 14<sup>th</sup>, 2018 at Southern California Edison's Energy Education Center in Tulare, CA. The meeting took on place, as usual, across from the annual World Ag Expo and gave attendees to catch up on the latest and greatest in Agriculture while also getting updated on the state of ASABE in California and Nevada. The evening was MC'd by ASABE CA-NV Chair Balaji Sethuramasamyraja (CSU Fresno) and Public Relations Chair Hossein Edalati (UC Davis BAE). The meeting included a student poster competition and reception, dinner, and the business meeting, which included a short speech by ASABE President Stephen Searcy, awards and recognition of longtime ASABE members, school updates, nomination and election of new officers, a review of the section's finances by Section Treasurer/Secretary Bo Liu, and a keynote speech about the Oroville Dam Spillway Repair Process given by Dale Brown from the Department of Water Resources.

## Student poster competition & awards

The meeting kicked off with the student poster presentation, which saw the entry of more posters than in any of the 4 years past. In total 7 undergraduate and 7 graduate student posters participated. Posters included topics such as algae cultivation on wastewater, hydroponics, the use of drone and remote sensing in agriculture for irrigation and crop health monitoring, tractors and tractor implements, SmartFarm initiative, and methane mitigation in the dairy industry among others.

The winning posters were:

Undergraduate 1<sup>st</sup> place, Cal Poly agBOT Team 2018 presented by Zach Eagan (Cal Poly BRAE)

Graduate 1<sup>st</sup> place, Effect of Solid-Liquid Separation on the Mitigation of Methane Emissions from Dairy Manure Lagoons presented by Abdolhossein Edalati (UC Davis BAE).

Undergraduate 2<sup>nd</sup> place, Design and Development of Single Operator Quick Detach Scraper Implement for Filling Pivot Tracks in Center Pivot Irrigation presented by Justin Dykstra (CSU Fresno).

Graduate 2<sup>nd</sup> place, SmartFarm – Decision Support Tool, Outreach, and Education Program presented by Caleb Fink (Cal Poly BRAE).

## Engineer of the Year Award



This year, Lynn Groundwater, PE, won the ASABE CA-NV Section Engineer of the Year Award. She is an Associate Engineer at Provost & Pritchard where she has been working for nearly five years in the area of Civil and Agricultural engineering. Ms. Groundwater has experience in a variety of different projects, including groundwater assessment studies and evaluating water systems. She has worked on water well projects, Sustainable Groundwater Management Act projects including Basin Boundary Modifications, feasibility studies, and water resources design projects.

A recent and ongoing project that Ms. Groundwater has spent time on includes working with Westlands Water District as a Project Engineer. Specifically, Ms. Groundwater provided her expertise by helping with the design and structures of the pipelines, while also managing the project, delegating tasks, and monitoring the budget. The project provided the water district with more water supplies.

Another project that Ms. Groundwater is heavily involved in is working as a project engineer for the North Kings Groundwater Sustainability Plan for a 312,000 acre agency in Fresno County. The project entails preparing a plan that meets the needs of thirteen different agencies with different priorities and water supplies. Ms. Groundwater helped with writing sections of the report, coordination and outreach with participating agencies, and data collection and analysis.

Ms. Groundwater is passionate about the field in which she works; she travels to universities throughout the area to promote the professionalism in agricultural engineering and she serves as a resource to the younger generations of engineers.

## Honoring Paul Burkner, 2017 Cal Poly Alumnus



Also honored at this year's ASABE CA-NV Section meeting was Paul Burkner, Co-Founder and Vice President of Ag Industrial Manufacturing, and Cal Poly College of Agriculture, Food & Environmental Sciences 2017 Honored Alumnus. Burkner graduated from Cal Poly with an Agricultural Engineering degree in 1964. He is an ASABE fellow, inducted in 2009, and has worked for nearly 40 years as an Agricultural Engineer. More information about Paul and his work have been featured on the Cal Poly website, in a 2009 article by his hometown's local newspaper, the Lodi News-Sentinel, and a video honoring Paul's contributions put together by his alma mater, Cal Poly:

[Cal Poly College of Ag, Food & Environmental Sciences Honorary Alumnus Page](#)

[Lodi News-Sentinel 2009 Article featuring Paul Burkner](#)

[2017 Cal Poly Honored Alumnus, Paul F. Burkner](#)

## Section Officer Nominations and Election

A nomination request was made to fill the officer position of Vice Chair, Public Relations, and Student/Industry Liaison.

Dr. Yiannis Ampatzidis, the 2017 Vice Chair and former ASABE CA-NV Membership Chair, moved on from CSU Bakersfield to become Assistant Professor in the BAE Department at University of Florida. Pappu Yadav, the 2017 ASABE CA-NV Industry/Student Liaison completed his MS in Electrical Engineering from CSU Fresno where he did research on the use of remote sensing in irrigation, and has since joined Texas A&M BAE Department as a graduate student.

Hossein Edalati, MS, Tyler Barzee, MS, and Ferisca Putri from the BAE Department at UC Davis were nominated and elected to the Vice Chair, Public Relations, and Industry/Student Liaison position. Here is the list of the 2018 ASABE CA-NV Section officers with a detailed bio available on the ASABE CA-NV website (<http://www.asabecanv.org>):

### Executive Committee

Chair – [Balaji Sethuramasamyraja, PhD](#) (CSU Fresno)

Vice Chair – [Hossein Edalati, MS](#) (UC Davis BAE)

Treasurer/Secretary – [Bo Liu, PhD](#) (Cal Poly BRAE)

Past Chair – [Carolyn Jones, PE](#) (USDA NRCS)

### Standing Committee

Membership Chair – [Zhongli Pan, PhD](#) (UCD BAE & USDA NRCS)

Program Chair – [Traeger Cotton, PE](#) (Southern California Edison)

Public Relations – [Tyler Barzee, MS](#) (UC Davis BAE)

Career Development – [Shawn Ashkan](#) (CSU Fresno)

Awards Chair – [Nick Simonian, MS](#) (CSU Fresno)

Industry/Student Liaison – [Ferisca Putri](#) (UC Davis BAE)

## Address from the ASABE President



Professor Stephen Searcy, the current President of ASABE and Head at Texas A&M University's Department of Biological and Agricultural Engineering, was also in attendance. He spoke briefly about the state of ASABE as a whole and highlighted a problem of a low, but steadily declining ASABE membership pool. He provided data and showed that that drop in membership can be attributed to new members who sign up but do not renew, perhaps indicating the need to demonstrate the utility and relevancy of ASABE to the new generation of Biological and Agricultural Engineers.

## Keynote Speech by Dale Brown about the Oroville Dam Spillway Recovery

Dale Brown, a Supervising Engineer from the California Department of Water Resources (DWR), delivered an interesting and informative speech about the aftermath and difficult repairs process following the collapse of the Oroville Dam Spillway in 2017. Brown, a graduate of UC Davis BAE, served as the Deputy Project Manager for the Oroville Emergency Recovery Spillways team and provided a great amount of insight into the intense amount of work and pressure that went into the repair process and to ensuring timely completion of that work in time for the 2018 wet months.

Brown gave his presentation aided by several videos of the damage following the collapse and the repairs process, which are available through the [California DWR YouTube Channel](#).

The speech highlighted the importance of the Engineering discipline, both the catastrophic consequences of failures and the strength of the human intellect, willpower, and collective effort and planning that can transform engineering designs on paper into real-life structures that transform the landscape and the way in which we live.

**(Photo)** Dale Brown, Supervising Engineer at the California DWR and Deputy Director of the Oroville Emergency Recovery Spillways team discusses the state of the recovery effort as of August 15<sup>th</sup>, 2017.



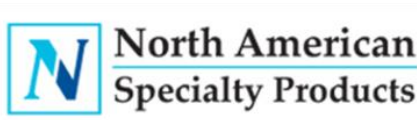
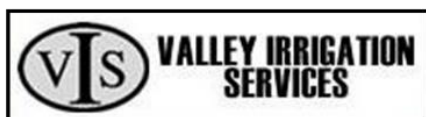
## Thank you to our Meeting Sponsors

The annual ASABE CA-NV Section meeting would not be possible without the support and donations of its meetings sponsors, which contribute directly to cover the cost of dinner, the subsidized cost of attendance for students, and the awards prizes. Thank you again to our 2018 Sponsors: Ag Industrial Manufacturing, Berendsen Fluid Power, Provost & Pritchard, TechnoFlo Systems, and Valley Irrigation Services.

To sponsor next year's meeting please contact Section Secretary Treasurer Bo Liu ([bliu17@calpoly.edu](mailto:bliu17@calpoly.edu)) and Vice Chair, Hossein Edalati ([ahedalati@gmail.com](mailto:ahedalati@gmail.com))



**On behalf of the members of ASABE CA-NV section  
Thank you to all of our 2012-2017 sponsors  
Our meetings would not be possible without you.**



❖ **Do You Feel A Calling?**

Do you have a desire to get more involved with ASABE? Do you have ideas for Agricultural Engineering Activities? Do you like sharing about the ASABE? If you answered yes to any of the questions, E-mail [Balaji Seth](mailto:Balaji.Seth) or Call (559) 321-6826.

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- For previous editions of the Update, please visit [www.asabecanv.org](http://www.asabecanv.org).
- If you have questions or comments, feel free to contact Balaji (559 321 6826 or [balajis@csufresno.edu](mailto:balajis@csufresno.edu))
- If you have ideas for Update items or would like to get involved in the leadership team, please let us know!