



Communications

In Q3 of 2017, CAHNRS Communications Office published **151** Online Articles/Posts that highlight accomplishments in Academic Programs, Research and Extension. A selection is given below:

TOP NEWS STORIES

- [The Making of a Queen](#) – By **Scott Weybright** | Published August 16, 2017 | Appeared on YouTube, online newsletters, social media
- [Cider on Your City Block: Community Apple Pressing to Reveal Urban Bounty](#) – By **Seth Truscott** | Published September 5, 2017 | Appeared in Fruit Growers News, WSU Extension, WSU News, Seattle Carpe Diem, Seattle’s Child, The Stranger, City Fruit, social media
- [Sweet Three-Peat: 3rd ‘Big Scoop’ Win For Animal Sciences, WSU Creamery](#) – By **Seth Truscott** | Published July 17, 2017 | Appeared in Capital Press, Pullman Radio, Spokane How’s Business, WSU News, other outlets

AWARDS

- **First Place**, National Agricultural Alumni & Development Association, Campaign/Series Division, WSU Honey Bee + Pollinator Campaign

SOCIAL MEDIA

Facebook	49 Posts	955 Likes	68,196 Reached	2,999 Fans (+2.5%)
			Top Post: WSU Bees: Raising a Queen	
Twitter	426 Tweets	292,595 Impressions	8,349 Engagements	4,504 Followers (+2%)

Faculty Highlights

- The work of multiple research efforts in CAHNRS gained international attention in media outlets such as **National Public Radio** (*all things considered*, *marketplace*, and *the salt*), **Forbes Magazine**, and **Fortune**, including:
 - [“No Offense, American Bees, But Your Sperm Isn’t Cutting It”](#) details the work of **Brandon Hopkins** (Ent.) in cryopreserving bee sperm with the intent of creating new breeds with greater genetic diversity.
 - [“Washington Apple Growers Sink Their Teeth Into The New Cosmic Crisp,”](#) [“This Is What It Looks Like When A New Apple Comes To Town,”](#) [“How New Roots Are Driving An Apple Renaissance,”](#) and [“Red Delicious Apple Losing Its Appeal In Favor Of Jazzy Newcomers Like Cosmic Crisp,”](#) the first wave of plantings are anticipated to yield 5 million 40-pound boxes – a feat that took Honeycrisp 20 years to achieve. (**Kate Evans** and **Jim McFerson** – Hort.)
 - [“Zapping Noxious Weeds on Organic Farms is Harder Than You Think”](#) outlines ongoing challenges that organic farming practices grapple with during times of unusual weather. **Ian Burke** (CSS) was interviewed for the piece.
 - [“Amazon’s ambitions for Food Tech Go Well Beyond Whole Foods”](#) describes microwave-assisted thermal sterilization (MATS) technology and its disruptive impact on the food processing industry. Representatives from Amazon visited WSU in February to assess the potential role of MATS in the recent acquisition of Whole Foods. The technology was developed by Regents Professor **Juming Tang** (BSE).
- **Jonathon Yoder** (SES) was elected to the [Washington State Academy of Sciences](#). Dr. Yoder joins 12 other faculty from CAHNRS in the Academy, including 3 in SES.
- **John Peters** (IBC) gave the invited talk in the opening [plenary session at Plant Biology 2017](#) “Innovative Solutions for Increasing the Impact of Biological Nitrogen Fixation on Crop Plants,” Honolulu, HI, 6/24/17-6/28/17.
- **Larry Fox** (AS) was awarded the [Purina Animal Nutrition Teaching Award](#) in Dairy Production from The American Dairy Science Association. The award recognizes outstanding teaching of undergraduate students in dairy science.
- **Carol Black** (Ent.) received the [Distinguished Achievement Award in Extension](#) from the Entomological Society of America.

- Multiple faculty members from the School of Economic Sciences received awards and were elected to leadership roles at the Western Agricultural Economics Association's annual meeting, held July 9-11 in Lake Tahoe, CA.
 - **Randy Fortenberry** (Endowed Chair of Small Grains) was named president of the association for 2017-2018.
 - Named directors of the association were **Jo Ann Warner** for 2017-2020, and **Karina Gallardo** through 2019.
 - **Vicki McCracken** (SES and Chair AMDT) was elected a Fellow of the association.
- **Elizabeth (Betsy) Beers** (Ent.) was presented the Award for Excellence in Integrated Pest Management by Syngenta Crop Protection.
- **Jim McFerson** (TFREC) gave an invited talk at FullConTech, an event bringing together members of the Washington Technology Industry Association, representing tech, education, business and government sectors. His presentation "The role of immigrant workers in WA agriculture," highlighted research and extension contributions from WSU faculty to improve the productivity, sustainability, and economic viability of the state's tree fruit industry.
- **Hanu Pappu** (PP) was appointed the Carl F. and James J. Chuey Endowed Chair in Dahlia Virus Research and Development.
- **Markus Flury** (CSS) received the 2017 Don and Betty Kirkham Soil Physics Award from the Soil Science Society of America – the AAU recognizes this achievement as a Prestigious Award.
- **Tim Murray** (PP) was awarded Guest Professor status by Jilin Agricultural University, China, and gave an invited lecture on "Wheat diseases of wheat in Washington State." Dr. Murray also gave an invited presentation at the 50th anniversary meeting of the Brazilian Phytopathological Society entitled "Resistance to eyespot disease of wheat and its wild relatives" in Uberlandia, Brazil August 23.
- **Steve Powers** (SOE) received the Gene E. Likens Award from the Ecological Society of America (ESA) for outstanding publication by a junior scientist in the past year – "Long-term accumulation and transport of anthropogenic phosphorus in three river basins" published in Nature Geoscience in 2016.
- **Allyson King** (SOE) was invited to Co-Chair the 2018 International System Dynamics Society Conference which will be held in Reykjavik, Iceland, August 5 through August 9, 2018.
- **Timothy Paulitz** (PP) gave a keynote talk at the 6th International Cereal Nematode Workshop in Agadir, Morocco. He discussed the recent research on cereal cyst nematode in Washington State, part of a collaboration with **Kimberly Garland-Campbell** (CSS), and trainees **Yvonne Thompson** and **Nuan Wen**.

Grant Funding

CAHNRS Office of Research faculty received **\$10M⁺** in extramural support in the form of new/ongoing grants, contracts, agreements and services rendered. A selection of federal awards (with award total) is given below:

New Grants Include:

- **Min Du** (AS) and **Mei-Jun Zhu** (SFS) were awarded a \$1.9M R01 grant from the NIH National Institute of Child Health and Human Development to study maternal obesity, AMPK, and fetal brown adipogenesis.
- **John Peters** (IBC) was awarded a \$450K grant from the Department of Energy (NREL lead) to study the mechanism of photochemical N₂ reduction.
- **Lindsey du Toit** (PP) was awarded a \$286K grant from USDA-SCRI (U. Arkansas lead) to develop genetic and molecular resources to improve spinach production and management.
- **Chad Kruger** (CSANR) and **Claudio Stöckle** (BSE) were awarded a \$491K grant from USDA-NIFA (U. Florida lead) to study climate adaptation and mitigation in fruit and vegetable supply chains.
- **Haiying Tao** (CSS) and **Bill Pan** (CSS) were awarded a \$200K grant from USDA-NRCS to carry out soil health assessments for cropping systems in the pacific northwest.

- **Manuel Garcia-Perez** (BSE) was awarded a \$330K grant from the NSF-CBET program for experimental studies and computational calculations to advance our understanding of biochar surface chemical functionalities responsible for pollutants removal.
- **Steven Norberg** (ANR), **Steven Fransen** (CSS) and **Don Llewellyn** (AS) were awarded a \$250K grant from USDA-AFRP to determine genetic factors that influence forage quality in alfalfa.
- **Manoj Karkee**, **Lav Khot** (both WSU- IAREC, CPAAS, and BSE) and **Sindhuja Sankaran** (BSE) were awarded a \$250K Specialty Crop Block Grant from WSDA for novel sensing for potato postharvest quality and loss management in bulk storage environment.

Large Grants that Received Yearly Renewals Include:

- **John Peters** (IBC) and **Maren Friesen** (PP/CSS), Engineering Synthetic Symbiosis Between Plant and Bacteria to Deliver Nitrogen to Crops, NSF-IOS, \$1.4M
- **Doreen Main**, **Stephen Ficklin**, and **Sook Jung** (all Hort.), Standards and Cyberinfrastructure that Enable “Big-Data” Driven Discovery for Tree Crop Research, NSF-IOS, \$967K
- **Thomas Power** (HD), **Karen Barale** (YFP), **Jane Lanigan** (HD) and **Louise Parker** (YFP), Use of Engaging Online Videos in Conjunction with New Feeding Content to Enhance a Current EFNEP Program in the Prevention of Childhood Obesity, USDA-AFRI (Baylor COM lead), \$351K
- **Juming Tang** (BSE) and **Mei-Jun Zhu** (SFS), Enhancing Low-Moisture Food Safety by Improving Development and Implementation of Pasteurization Technologies, USDA-AFRI (Mich. St. U. Lead), \$209K
- **Norman Lewis** (IBC), An integrated –omics guided approach to lignification and gravitational responses: the final frontier, NASA-Kennedy Space Center, \$300K
- **Helmut Kirchhoff** (IBC), Understanding architectural dynamics in plant photosynthetic membranes, DOE, \$190K
- **John Browse** (IBC), Systems Biology to Improve Camelina Seed and Oil Quality Traits, DOE (Mich. St. U. Lead), \$128K
- **Michael Kahn** (IBC), Training in Biotechnology Emphasis in Protein Chemistry, NIH, \$447K
- **John Peters** (IBC), Biological Electron Transfer and Catalysis Energy Frontier Research Center Project, DOE (Mich. St. U. Lead), \$250K
- **Mark Pavsek** (Hort.) and **Richard Knowles** (Hort.), Potato Variety Development in the Northwest, USDA-NIFA, \$797K
- **Lee Kalscits** and **Stefano Musacchi** (Hort.), Accelerating the Development, Evaluation, and Adoption of New Apple Rootstock Technologies to Improve Apple Grower Profitability and Sustainability, USDA-SCRI (Cornell U Lead), \$191K
- **Markus Lange** (IBC), Unraveling the regulation of terpenoid oil and oleoresin biosynthesis for the development of biocrude feedstocks, DOE, \$447K
- **Cameron Peace**, **Lisa DeVetter**, **Kate Evans**, **Desmond Layne**, **Doreen Main**, and **Jim McFerson** (Hort.), **Karina Gallardo** and **Vicki McCracken** (SES), ROSBREED: Combining disease resistance with horticultural quality in new rosaceous cultivars, USDA-SCRI (Mich. St. U. Lead), \$471K
- **Laura Hill**, **Matthew Bumpus** and **Brittany Rhoades-Cooper** (all HD), A randomized trial of letting go and staying connected, an interactive parenting intervention to reduce risky behaviors among students, NIH R01, \$530K

Publications

CAHNRS faculty published **133** articles in peer-reviewed journals and conference proceeding: these are catalogued in our Weekly Published Research Archive ([available here](#)). A selection of these publications, which appeared in journals that rank in at least the 90th percentile in their respective fields, as determined by Thomson Reuters InCites, is provided below with their 5-year impact factor.

DISCOVERY

- **John Peters** (IBC), “Electron bifurcation: Thermodynamics and kinetics of multi-electron brokering in biological redox chemistry” ACCOUNTS OF CHEMICAL RESEARCH – Impact Factor 22.8 – 97th percentile in Multidisciplinary Chemistry
- **John Peters** (IBC), “Microbial substrate preference dictated by energy demand rather than supply,” NATURE GEOSCIENCE – Impact Factor 14.4 – 99th percentile in Multidisciplinary Geosciences
- **Zhiwu Zhang** (CSS), “Genome-wide association studies dissect the genetic networks underlying agronomical traits in soybean,” GENOME BIOLOGY – Impact Factor 13.6 – 98th percentile in Biotechnology and Applied Microbiology
- **Helmut Kirchoff** (IBC), “Sublocalization of Cytochrome b(6)f Complexes in Photosynthetic Membranes,” TRENDS IN PLANT SCIENCE – Impact Factor 13.4 – 99th percentile in Plant Sciences
- **John Peters** (IBC), “Reduction Potentials of [FeFe]-Hydrogenase Accessory Iron-Sulfur Clusters Provide Insights into the Energetics of Proton Reduction Catalysis,” JOURNAL OF THE AMERICAN CHEMICAL SOCIETY – Impact Factor 12.9 – 94th percentile in Multidisciplinary Chemistry
- **Markus Lange** (IBC), “Biosynthesis of Diterpenoids in *Tripterygium* Adventitious Root Cultures,” PLANT PHYSIOLOGY – Impact Factor 7.4 – 95th percentile in Plant Sciences
- **Amit Dhingra** (Hort.), “The Role of Light-Dark Regulation of the Chloroplast ATP Synthase,” FRONTIERS IN PLANT SCIENCE – Impact Factor 4.7 – 91st percentile in Plant Sciences
- **Min Du** (AS), **Mei-Jun Zhu** (SFS) and **Roy Navarre** (PP), “Purple Potato Extract Promotes Intestinal Barrier Function and Differentiation by Activating AMP-activated Protein Kinase,” FASEB JOURNAL – Impact Factor 5.4 – 92nd percentile in Biology
- **John Browne** (IBC), “Trimethylguanosine Synthase1 (TGS1) Is Essential for Chilling Tolerance,” PLANT PHYSIOLOGY – Impact Factor 7.4 – 95th percentile in Plant Sciences
- **Min Du** (AS), “Identification of dipeptidyl peptidase-IV inhibitory peptides from mare whey protein hydrolysates,” JOURNAL OF DAIRY SCIENCE – Impact Factor 2.9 – 96th percentile in Dairy & Animal Science
- **Min Du** (AS) and **Mei-Jun Zhu** (SFS), “Raspberry intake reduces skeletal muscle lipid accumulation and improves insulin sensitivity in mice fed high fat diet,” FASEB JOURNAL – Impact Factor 5.4 – 92nd percentile in Biology
- **Min Du** (AS) and **Mei-Jun Zhu** (SFS), “Maternal high fat diet alters offspring susceptibility to DSS-induced colitis,” FASEB JOURNAL – Impact Factor 5.4 – 92nd percentile in Biology
- **Kiwamu Tanaka** (PP) and **B.W. (Joe) Poovaiah** (Hort.), “Calcium signatures and signaling events orchestrate plant-microbe interactions,” CURRENT OPINION IN PLANT BIOLOGY – Impact Factor 7.9 – 97th percentile in Plant Sciences

TRANSLATIONAL

- **Sara Waters** (HD), “Affect Contagion Between Mothers and Infants: Examining Valence and Touch,” JOURNAL OF EXPERIMENTAL PSYCHOLOGY-GENERAL – Impact Factor 5.9 – 96th percentile in Experimental Psychology
- **Gustavo Barbosa-Cánovas** (BSE), “Bioaccessibility of bioactive compounds from fruits and vegetables after thermal and nonthermal processing,” TRENDS IN FOOD SCIENCE & TECHNOLOGY – Impact Factor 6.4 – 97th percentile in Food, Science & Technology

- **Steve Sheppard** and **Brandon Hopkins** (Ent.), “Effects of diluents and plasma on honey bee (*Apis mellifera* L.) drone frozen-thawed semen fertility,” THERIOGENOLOGY – Impact Factor 2.1 – 92nd percentile in Veterinary Sciences
- **Scot Hulbert** (PP), **Tim Paulitz** (PP) **Amit Dhingra** (HORT), “Bacterial communities on wheat grown under long-term conventional tillage and no-till in the Pacific Northwest of the US,” PHYTOBIOME – (Impact Factor Forthcoming)
- **Manoj Karkee**, **Qin Zhang** (BSE, CPAAS), and **Karen Lewis** (Ext.), “Design, integration, and field evaluation of a robotic apple harvester,” JOURNAL OF FIELD ROBOTICS – Impact Factor 4.4 – 90th percentile in Robotics
- **Lav Khot** and **Sindhuja Sankaran** (BSE), “FAIMS based volatile fingerprinting for real-time postharvest storage infections detection in stored potatoes and onions,” POSTHARVEST BIOLOGY AND TECHNOLOGY – Impact factor 3.6 – 93rd percentile in Horticulture
- **Girish Ganjyal** (SFS), “Waxy flour degradation - Impact of screw geometry and specific mechanical energy in a co-rotating twin screw extruder,” FOOD CHEMISTRY – Impact Factor 4.5 – 96th percentile in Food Science & Technology
- **Mei-Jun Zhu** (SFS), “Antimicrobial efficacy of cinnamon oil against Salmonella in almond based matrices,” FOOD CONTROL – Impact Factor 3.6 – 91st percentile in Food, Science & Technology
- **Brandon Hopkins** and **Steve Sheppard** (Ent.), “Gel-coated tubes extend above-freezing storage of honey bee (*Apis mellifera*) semen to 439 days with production of fertilised offspring,” REPRODUCTION FERTILITY AND DEVELOPMENT – Impact Factor 2.7 – 93rd percentile in Zoology

REVIEWS/BOOKS

- **Scot Hulbert** (PP), “Foundational and translational research opportunities to improve plant health,” MOLECULAR PLANT MICROBE INTERACTIONS – Impact Factor 4.6 – 92nd percentile in Plant Sciences
- **Andrei Smertenko** (IBC), “Cytokinesis: Terminology for Structures and Processes,” TRENDS IN CELL BIOLOGY – Impact Factor 13.3 – 95th percentile in Cell Biology
- **Markus Flury** (CSS), “Role of air-water interfaces in colloid transport in porous media: A review,” WATER RESOURCES RESEARCH – Impact Factor 4.7 – 96th percentile in Water Resources
- **Andrei Smertenko** (IBC) and **Karen Sanguinet** (CSS), “Auxin, microtubules, and vesicle trafficking: conspirators behind the cell wall,” JOURNAL OF EXPERIMENTAL BOTANY – Impact Factor 6.5 – 94th percentile in Plant Sciences
- **Sindhuja Sankaran** (BSE) co-authored the book chapter “Sensing for stress detection and high-throughput phenotyping in precision horticulture,” which appeared in “Automation in Tree Fruit Production: Principles and Practice,” Edited by **Qin Zhang** (BSE, CPAAS), pp. 28-42.
- **Felix Muñoz-Garcia** (SES) authored a new textbook, “Advanced Microeconomic Theory: An Intuitive Approach with Examples,” published by MIT Press. The book is based on doctoral courses in SES and benefits from the feedback of doctoral students and faculty.

Research & Extension Events

- WA 38 (COSMIC CRISP) Tips to Optimize Fruit Quality Field Day – September 27, 2017. Over 100 industry professionals attended the event, which focused on management tips for WA 38 to consistently yield superior quality fruit. Topics included how horticulture systems impact pack out, how to determine optimal harvest dates, the (dis)advantages of one versus two picks, the utility of pre-harvest fungicide applications, and ways to incorporate mechanization (such as hedging). Contact: **Stefano Musacchi** (Hort.) and **Karen Lewis** (ANR)

- CPAAS Agricultural Technology Day – July 31, 2017. This event was held to educate growers, agricultural industry professionals, crop consultants and researchers about the cutting-edge research that is performed by CPAAS and its affiliates. It included a plenary session, 30+ posters, technology displays, and demonstrations that showcased agricultural automation, robotics, and precision agriculture technologies. Contact: **Qin Zhang** (BSE, CPAAS)
- ‘Train-The-Trainer’ field workshop on “Scouting for virus disease symptoms in vineyards - what, when, and how?” – September 8, 2017. This event was organized at Cold Creek Vineyards, Mattawa and offered workshops that covered symptoms of viral diseases in wine grape cultivars, diagnosis and management. Among the 15 attendees were regional viticulture technicians, field personnel, and vineyard managers from the WA wine grape industry. Contact: **Naidu Rayapati** (PP)
- Barley Breeding Field Walk – Hidden River Farms, Montesano, WA. About 40 attendees gathered in July to evaluate germplasm in the WSU barley breeding program for craft malting, brewing and distilling. WSU personnel and regional stakeholders are eager to develop this high-value market for western Washington grain farmers. The research receives funding from the Center for Sustaining Agriculture and Natural Resources BIOAg program. Contact: **Stephen Bramwell** (Ext.), **Kevin Murphy** (CSS), and **Tom Collins** (VE)
- WSU Supporting Next Generation Tree Fruit Transitioning to Organic. WSU and the Next Generation Tree Fruit Network hosted two field days in August that were focused on transitioning conventional farming operations to organic. Forty-eight (48) producers and industry professionals learned about soil renovation, compost, paperwork and certification from expert producers Mike Brownfield and Rick Orozco, WSU Tree Fruit Extension Specialist **Tianna DuPont**, and WSDA certifiers. Contact: **Tianna DuPont** (Ext.)
- Washington State Viticulture Field Day 2017. This field day was co-hosted by WSU Viticulture Extension and the Washington State Grape Society and included a series of talks on New Mites in Washington; Native Plants and Pest Management, Scouting Techniques for Vineyard Pest and Disease Management, Sprayer Calibration and Nozzle Demo, Sprayer Trial and Discussion of How Sprayers Work. Contact: **David James** (Ent.), **Michelle Moyer** (VE), **Gwen Hoheisel** (Ext.), and **Margaret McCoy** (Ext.)

WSU Extension Highlights

- **Gwen Hoheisel** (Ext.) was the Keynote speaker for the Foundation Dinner of American Society of Agricultural and Biological Engineers.
- **Amit Dhingra (Hort.)**, **Linda McClean** (Ext.), **Dan Fagerlie** (Ext.) and **Todd Murray** (ANR Asst. Director) highlighted tribal Extension Programs and WSU Research to the Northwest Intertribal Agriculture Council in Pendleton.
- **Sharon Collman** (Ext.) and **Todd Murray** (ANR Asst. Director) taught over 300 tree huggers about bugs at the PNW Chapter of the International Society of Arboriculture.
- Over 75 Latino families learned about bioenergy and poplar tree production from the Advanced Hardwood Biofuels Northwest team, led by **Patricia Townsend** (Ext.)
- **Kevin Zobrist** (Ext.) presented “Reaching Small Forest Landowners in the 21st Century” at the International Union of Forest Research Organization 125th Anniversary Congress, in Freiburg, Germany.

Student News

- **Christine Ermita** (PhD student, PP) co-authored, “Large-scale deployment of a rice 6 K SNP array for genetics and breeding applications,” RICE – Impact Factor 4.6 – 92nd percentile in Agronomy (Mentor: **Scot Hulbert**, PP)
- **Melanie Thornton** (PhD 2017, SOE) has been accepted as a AAAS Congressional Science Fellow sponsored by GSA/USGS in Senator Udall’s office in Washington DC. Senator Udall represents the state of New Mexico.
- **Zachary Cartwright** (PhD student, SFS) was featured in the *Food Technology IFT17* magazine for receiving top honors in the IFT Thesis Video Competition as winner of the IFT Student Association thesis video competition.

- **James Chen** (PhD student, CSS) won the Student Workshop Competition at the 2017 International Plant and Animal Genome (PAG) Asia meeting. As part of the award he will be funded to attend PAG 2018 in San Diego. (Mentor: **Zhiwu Zhang**, CSS)
- **Holly Lane** and **Carmen Swannack** (undergraduate students in the Integrated Plant Sciences Ag Biotech) both received the **Golden Opportunity Scholarship** from the Crop Science Society of America. This will allow them to travel to the ASA/CSSA/SSSA annual meeting in Tampa, FL, be paired with a mentor/scientist, and experience the meetings and network with other scientists. These two students were selected from a national search, and represent the best undergraduate students in the agricultural field. (Mentors: **Michael Neff** and **Arron Carter**, CSS)
- **Cornelius Adewale** (PhD student, Environmental Natural Resource Environmental & Natural Resource Sciences) was awarded the **Bullitt Foundation Environmental Fellowship**. One award is made annually to a graduate student in Washington, Oregon, or British Columbia. The fellowship is funded at \$100K for 2-years of post-doctoral work. (Mentor: **Lynne Carpenter-Boggs**, CSS)
- **Jeremy Thompson** (PhD student, CSS) was selected by The Irrigation Foundation to attend the Irrigation Show and Education Conference as one of the Irrigation E3 winners. The show takes place November 6 – 10 in Orlando, Florida. The Foundation will cover the cost of travel, accommodations (up to 5 nights), registration, and education classes. (Mentors: **Pete Jacoby** and **Karen Sanguinet**, CSS)
- Students in the **CAHNRS Agriculture Education program** won the Teach Ag Day video competition by developing a [YouTube video](#) that logged the most hits nationally. This is the second year in a row WSU has won this award, beating out top-tier institutions for agriculture education such as Purdue, Texas A&M, Kentucky, and others.
- **Caitlin Jacques** (PhD student, MPS) completed a National Science Foundation East Asian and Pacific Summer Institutes Fellowship during the summer of 2017. She worked with Dr. Keiko Sugimoto at RIKEN in Japan. Ms. Jacques is the second student to be awarded the NSF EAPSI fellowship from Dr. **Michael Neff's** lab.

Facilities, Infrastructure & Programmatic

- The Charles “Chas” Nagel Microbiology Laboratory was dedicated at the Wine Science Center on August 11 at the Tric-Cities Campus. CAHNRS Dean **Ron Mittelhammer**, Viticulture & Enology Director **Thomas Henick-Kling** and Academic Vice Chancellor **Martin Klotz** attended. Nagel, who died in 2007 at age 80, was a WSU scientist and a giant in the Washington wine industry, helping to prove that fine wine could be produced and marketed in this state. The new lab will help the Wine Science Center study the microbes that affect vines and wines, ultimately improving the Washington industry for years to come.
- The Pacific Northwest Canola Association received its Certificate of Incorporation from the WA Secretary of State in July, which is the first major step towards formation of the multi-state association. Canola acreage in Washington, Montana, and the Pacific Northwest reached record levels in 2017. In conjunction with this work, the Washington Oilseed Cropping Systems project has reached the 10-year mark. Since 2007, WOCS has helped advance canola, camelina, and safflower research and production, and WA state canola acreage has increased ten-fold thanks to strong local demand. Ongoing projects include work from faculty in CSS, PP, Entomology and Extension (**Scot Hulbert**, **Ian Burke**, **Bill Schillinger**, **Aaron Esser**, **Tim Paulitz**, **Isaac Madsen**, **David Crowder**, **Haiying Tao**, **Michael Neff**, **Steve Van Vleet**, **Dennis Row** and **Karen Sowers**).
- **Jim McFerson** (TFREC) received funding from Our Valley Our Future to coordinate a “Science in Our Valley” seminar series that will catalyze networking among public and private sector scientists, engage K-12 STEM educators, and contribute to the creation of a multi-institutional research incubator at the TFREC.
- The WSU Creamery will hold a Grand Opening “Cheese Cutting” ceremony on Friday October 27 at 9 AM – the event is open for all to attend. This Grand Opening comes on the heels of CAHNRS undergraduate students in SFS and AS being named the “Big Scoop” Award winner in the American Society of Animal Sciences Ice Cream Competition (July 9 – Baltimore, Md.) for the third year straight. The winning flavor was Huckleberry Ripple. Contact: **Kris Johnson** (AS) and **John Haugen** (Creamery Manager)