



Marketing & Communications

In Q4 of 2020, CAHNRS Communications published 52 online articles that highlight accomplishments in academics, research, and Extension. CAHNRS and Extension websites received 1,081,258 total page views and garnered 630,562 new site visitors. We increased our audience size and engagement on all social media with a total of 302,104 impressions across 3 platforms. Our web team continues to provide support and training to faculty and staff.

TOP NEWS STORIES

- [Study measures food insecurity in Washington families](#)—By **Lauren Paterson** | Published Nov. 13 in KOMO Seattle, Seattle Post-Intelligencer, Lewiston Tribune, Moscow-Pullman Daily News, MyNorthwest, Skagit Valley Herald, South Seattle Emerald, and more.
- [A decade-long, globe-trotting search for a better Christmas tree](#)—By **Seth Truscott** | Published Dec. 17 in Business Insider, Olean Times-Herald, Penn Live, Oklahoma Farm Report, Pinterest, USDA-NIFA, and more.
- [Bringing back a tasty old friend](#)—By **Scott Weybright** | Published Dec. 2 in The Spokesman-Review, Culinary Breeding Network, Chinook Observer, Tribal Tribune, The Star of Grand Coulee, Vegetable Growers News, USDA-NIFA social media, and more.

Faculty Highlights and Awards

- **Clare Coyne** (USDA-ARS/CSS) was elected as a Fellow of the American Association for the Advancement of Science for her international leadership in legume genetic resource conservation and contributions to the public understanding, global food security, and improved nutritional value of legumes.
- **Greg Galinato** (SES) won the Best Paper Award from the Journal of Agricultural and Resource Economics for the second consecutive year, the first person to ever have received this award twice. The paper was titled, "[Revenue-Neutral Pollution Taxes in the Presence of a Renewable Fuel Standard](#)".
- **Linda Chalker-Scott** (Hort./Ext.) won the Award of Excellence in Gardening and Gardens from the Council on Botanical and Horticultural Libraries for her book "Gardening with Native Plants of the Pacific Northwest," and she received the 2020 R.W.
- **Amit Dhingra** (Hort.) was nominated to the Board of Directors of the Council for Agricultural Science and Technology
- **Jonathan Yoder** (SES) named Distinguished Professor of Sustainable Development and elected president of the Universities Council on Water Resources, a national consortium of academic institutions and affiliates invested in water research, education, and outreach.
- **Patricia Pendry** (HD) interviewed for an article in [Discover magazine](#) and for [Episode 21](#) of PsychCrunch, the podcast from the British Psychological Society's Research Digest, about her research on health and well-being.

Grant Funding

CAHNRS Research and Extension faculty received **\$28.8M** in extramural support in the form of new and ongoing grants, contracts, agreements, and services rendered. A selection of new awards (with award total) is given below:

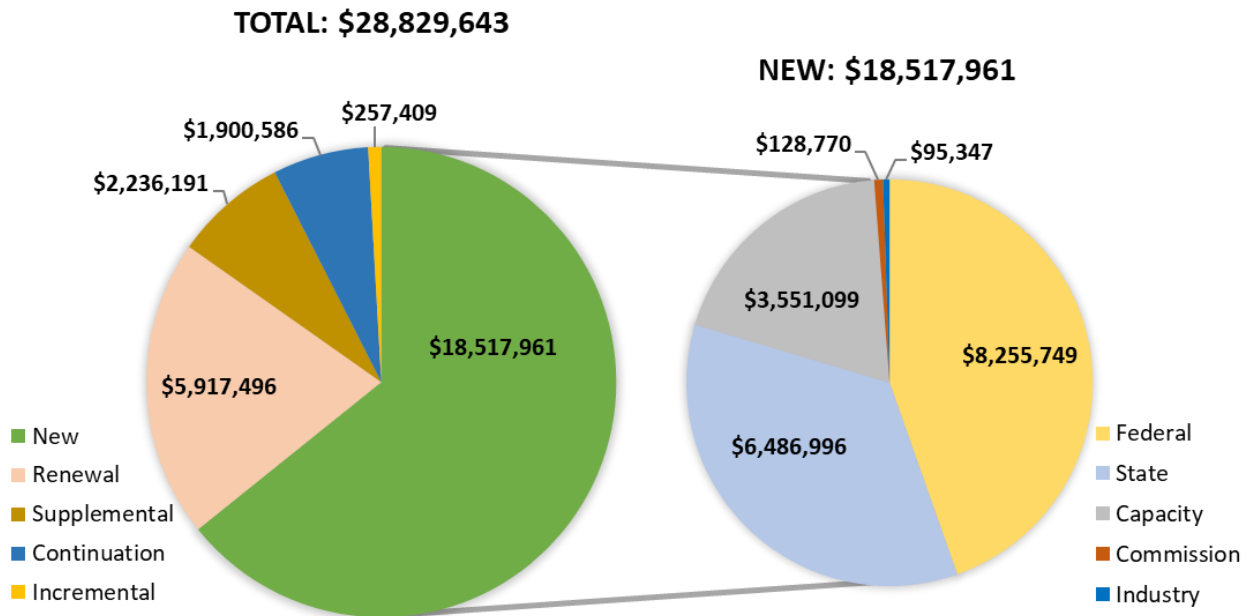
Notable Grants Include:

- **Don McMoran** (Extension ANR), "Western Regional Agricultural Stress Assistance Program," USDA-NIFA, \$7.2M (in collaboration with WSU College of Education)
- **Kevin Murphy** (Crop & Soil Sciences), **Girish Ganjyal** (School of Food Science), **Deirdre Griffin** (CSS), and **Franck Carbonero** (College of Medicine), "Enhancing Human Health and Nutrition from Soil to Society using

Quinoa as a Model Crop Species,” Foundation for Food and Agriculture Research, \$2M (includes \$1M in matching funds)

- **Tim Paulitz** (USDA-ARS/Plant Pathology) and **Bill Schillinger** (CSS), “ECON: Enhancing Camelina Oilseed Production with Minimum Nitrogen Fertilization in Sustainable Cropping Systems,” DOE, \$1.45M (Multi-institution \$11M award led by Montana State University)
- **Sammy Perone** (Human Development), “Probing the Origins of Approach and Avoidance Processes: Brain, Behavioral, and Contextual Factors,” NSF, \$602K
- **Danna Moore** (Social and Economic Sciences Research Center), “Comparative Effectiveness PTSD Trial of Sequenced Pharmacotherapy and Psychotherapy in Primary Care,” Patient-Centered Outcomes Research Institute, \$798K
- **Stefano Musacchi** (Horticulture) and **Karen Lewis** (Ext. ANR), “Precision Crop Load Management of Apple,” USDA-NIFA-SCRI, \$844K
- **Tobin Northfield** (Entomology), **Karina Gallardo** (School of Economic Sciences), **Gwen-Alyn Hoheisel** (Ext. ANR), **Elizabeth Beers** (Ento.), and **Suzette Galinato** (SES), “Moving from Crisis Response to Long-term Integrated Management of SWD: A Keystone Pest of Fruit Crops in the United States,” USDA-NIFA-SCRI, \$724K
- **Faith Critzer** (SFS) and **Troy Peters** (BSE), “Scientific Challenges and Cost-Effective Management of Risks Associated with Implementation of Produce Safety Regulations,” USDA-NIFA-SCRI, \$558K
- Several CAHNRS Faculty were awarded Specialty Crop Block Grants, totaling \$1.25M. Five teams included **Louis Nottingham** (Ento.); **Laura Lewis** (Ext. Food Systems/CED); **Amit Dhingra** (Hort.); **Yu Ma** and **Dorrie Main** (Hort.); and **Scott Harper** (Plant Path.), **Tobin Northfield** (Ento.), and **Tianna Dupont** (Ext. ANR).

Q4 Grant Funding



Peer-Reviewed Publications

CAHNRS faculty published **181** articles in peer-reviewed journals and conference proceedings. These are cataloged in our Weekly Published Research Archive ([available here](#)). In addition, Extension faculty published **6** Extension Fact Sheets and Technical Bulletins. A selection of notable publications is provided below with their 5-year impact factor.

- **Cameron Peace** (Hort.), **Jim McFerson** (TFREC), **Karina Gallardo** (SES/Ext., CPAAS), **Vicki McCracken** (Ext., SES), **Sook Jung** (Hort.), **Dorrie Main** (Hort.), and **Stijn Vanderzande** (Hort., Postdoctoral Researcher), “RosBREED: bridging the chasm between discovery and application to enable DNA-informed breeding in rosaceous crops,” HORTICULTURE RESEARCH– Impact Factor 4.4 – 99th percentile in Horticulture and 93rd in Plant Sciences
- **Jenifer McIntyre** (SoE), **Jasmine Prat** (SoE, MS student), and **Emma Mudrock** (undergraduate), “A ubiquitous tire rubber-derived chemical induces acute mortality in coho salmon,” SCIENCE– Impact Factor 44.4 –98th percentile in Multidisciplinary Sciences
- **Jill McCluskey** (SES), “Keeping up with the fast-moving world of crisis management,” AGRICULTURE AND HUMAN VALUES – Impact Factor 3.4 – 94th percentile in History & Philosophy of Science
- **Daniel Lunn** (IBC, Postdoctoral Researcher), **John Browse** (IBC), **Anh Le** (undergraduate), and **James Wallis** (IBC), “Castor LPCAT and PDAT1A act in concert to promote transacylation of hydroxy-fatty acid onto triacylglycerol,” PLANT PHYSIOLOGY– Impact Factor 7.5 – 96th percentile in Plant Sciences
- **Xiao Kong**, **Hanwu Lei**, **Chenxi Wang**, **Yunfeng Zhao**, **Erguang Huo**, **Xiaona Lin**, **Qingfa Zhang**, **Moriko Qian**, **Wendy Mateo**, and **Rongge Zou** (BSE), “Synthesis of graphene-like carbon from biomass pyrolysis and its applications,” CHEMICAL ENGINEERING JOURNAL– Impact Factor 9.4 – 98th percentile in Chemical Engineering and 97th in Environmental Engineering
- **Markus Flury** (CSS), **Henry Sintim** (CSS), **Andy Bary** (CSS), and **Carol Miles** (Hort.), “Four years of continuous use of soil-biodegradable plastic mulch: impact on soil and groundwater quality,” GEODERMA– Impact Factor 5.2 – 93rd percentile in Soil Science
- **Arjan Meddens** (SoE), “Ecological insights from three decades of animal movement tracking across a changing Arctic,” SCIENCE– Impact Factor 44.4 –98th percentile in Multidisciplinary Sciences
- **Juming Tang** (BSE), “Dry-inoculation methods for low-moisture foods,” TRENDS IN FOOD SCIENCE & TECHNOLOGY– Impact Factor 11.39 –99.6th percentile in Food Science & Technology
- **Linda Thomashow** and **David Weller** (USDA-ARS/Plant Path.), “Global landscape of phenazine biosynthesis and biodegradation reveals species-specific colonization patterns in agricultural soils and crop microbiomes,” eLIFE– Impact Factor 8.2 –95th percentile in Biology

Research, Extension Events, & Community Outreach

- **Kirti Rajagopalan**, **Lav Khot** (BSE), and other faculty in CAHNRS and VCEA organized the **D1G1TAL AgATHON 2020** in partnership with Microsoft, the Cascadia Innovation Corridor, and Innov8ag! Held virtually October 1-5, this was the region’s first agriculture-focused hackathon. 130 WSU students, postdocs, and researchers from more than 14 departments across 4 colleges and 5 campuses participated.
- **Ananth Kalyanaraman**, **Claudio Stockle** and other faculty in CAHNRS and VCEA organized the **2020 Digital Agriculture Summit**, held virtually October 6 & 7 with over 500 participants from all over the world, including U.S. Representative **Cathy McMorris Rogers**.
- **Bernardita Sallato** (Ext., IAREC) co-hosted the WSU-OSU Webinar Series: “Co-robotic harvest-aid platforms can increase harvesting speed” on October 15 and “Sweet cherry hardiness research & cold damage assessment” on October 29, co-presented by **Matthew Whiting** (Hort.)
- **Tianna DuPont**, **Bernardita Sallato**, **Andy McGuire** (Ext.), **David Granatstein** and **Lee Kalcsits** (TFREC) hosted Soil Health Workshop: How Do We Measure and Manage Soil Health for Productive Orchards? Nov. 4-5
- **Shuresh Ghimire**, **Carol Miles**, and **Lisa DeVetter** (Hort.) hosted “Biodegradable mulch professional development workshop,” on Nov. 18 through University of Connecticut, WebEx.
- **Michelle Moyer** (V&E) and Washington State Grape Society co-hosted Frost-Free Viticulture Field Day Webinar Series on Dec. 3 and 16
- **Louie Nottingham** (Ento.) and **Chris Strohm** co-presented the WSU-OSU Pear IPM Webinar on Dec. 2

Development

- **Northwest Farm Credit Union** committed to a \$2,000,000 cash gift, which will support a wide variety of CAHNRS areas including facility upgrades at IAREC/Prosser, support for honeybee research, 4-H program expansion, and an endowment for MANRRS (Minorities in Agriculture, Natural Resources, and Related Sciences).
- Chateau Ste. Michelle, DeLille Cellars, and Woodinville Wine Country Association joined to establish the **Woodinville Wine Country Scholarship for Diversity in Viticulture & Enology**.
- **Linda Bailey** retired on December 31st after 14 years of service in the CAHNRS development office. Linda raised \$48,000,000 for WSU in her time on the development staff and will be greatly missed by her team, her adoptive college, and her donors.