



## CAHNRS COMMUNICATIONS

In the month of October, CAHNRS Communications Office published **11** Online Articles that highlight accomplishments in Academic Programs, Research and Extension. A selection is given below.

### Top News Stories

- [Stink Bugs invade more counties, more homes in Washington state](#) By Linda Weiford | Published Oct. 18 - Appeared in Tri-City Herald, Capital Press, Yakima Herald-Republic, Centralia Chronicle, other outlets
- [Grant to help parents guide their college students](#) By Scott Weybright | Published Oct. 17 - Appeared in the Seattle Times
- [Social media, regular folks are reshaping fashion industry](#) By Linda Weiford | Published Oct. 13 - Appeared in WSU News, social media
- [Wheat Farmer, WSU supporter receives alumni award](#) By WSU News staff | Published Oct. 13 - Appeared on USWheat.org, Alumni Gazette, other outlets
- [Student works to boost renewable energy in Philippines](#) By Maegan Murray (Edited by CAHNRS) | Published Oct. 3 - Appeared in Asian Scientist, KVEW TV, other outlets
- [Southbound stopover by monarch butterfly a big surprise](#) By Linda Weiford | Published Oct. 3 - Appeared in The Preston Citizen, q-13 Fox, Tri-City Herald, ABC10, Fairfield Daily Republic, other outlets

### Social Media

<a href="#">Facebook</a>	18 posts	345 likes	26,024 reached	2,681 fans (up 0.9%)
		Top Post: <a href="#">CAHNRS Networking Night</a>		
<a href="#">Twitter</a>	98 tweets	62,923 impressions	1,392 engagements	4,048 followers (up 1.0%)
		Top Tweet: <a href="#">Thank you Farmers/#NationalFarmersDay</a>		

## RESEARCH – FACULTY HIGHLIGHTS

- **David Granatstein** (ANR) gave an invited presentation, “Current Trends for Temperate Organic Tree Fruits in North America” at the Second Canadian Organic Science Conference, Montreal, Quebec, Canada.
- **Kulvinder Gill** (CSS) is invited to give a plenary session talk at the International conference on Sustainable Ag Development, to be held at Faisalabad, Pakistan in November.
- **Lav Khot** (BSE) presented at Xconomy in Seattle on Oct 11, 2016 ([here](#)).
- **Manoj Karkee** (BSE) gave an invited presentation at the Annual Meeting of Oregon Weed Science Society, “Automated and Robotic Weed Control for Vegetable Crops.”
- **Allen Felsot** (Entomology) gave an invited presentation, "Pesticides and Health: Myths & realities" at the PestWorld 2016 conference Seattle, October 18-20, 2016.
- **Judy Theodorson** (SDC) presented a paper at the 3<sup>rd</sup> International Congress on Ambiances in Volos, Greece, “Architectural Vocabularies --Exploring the Analogous Relationship between Light and Water.”
- **Lisa Shipley** (SoE) was featured on the National Science Foundation website for her team’s research on “Food and Fear: Modeling animal tradeoffs shaped by landscape complexity” ([here](#)).

- **William Johnston** (CSS) was named as the 2<sup>nd</sup> recipient of the “William Griffith Distinguished Service Award” by the Inland Empire Golf Course Superintendents Assoc. for lifetime of achievement and service to the turfgrass industry of the Pacific Northwest.
- **John Reganold** (CSS) was invited as part of a 16-person delegation (from 8 countries) to attend a conference and meetings on Sustainable Development in North Korea. The North Korean Ministry of Environment and Land Protection provided the invitation to speak and share ideas on climate change, agriculture, water, forestry, waste disposal, and ecotourism. Dr. Reganold represented the area of sustainable agriculture. The five-day visit to North Korea was invaluable and provided Dr. Reganold not only with possible future research collaborations with North Korean scientists but also with scientists in the delegation.

## RESEARCH – GRANT FUNDING

*In the month of October, CAHNRS faculty received **\$8.5M\*** in extramural support in the form of new/ongoing grants, contracts, agreements and services rendered. A selection of new awards (with award total) is given below:*

- **Richard Knowles** and **Mark Pavek** (Hort.) were awarded a **\$730K** Special Grant from **USDA-NIFA** to support the development of potato varieties in the northwest.
- **Dorrie Main** (Hort.) was awarded a **\$200K** Specialty Crop Block Grant from **USDA-AMS** to enhance the sustainability of lentil production in Washington state.
- **David Crowder** (Entomology) was awarded a **\$320K** Crop Protection and Pest Management Grant from **USDA-NIFA** to improve integrated pest management of wireworms in cereal crops.
- **Hanu Pappu** (PP) was awarded a **\$200K** Specialty Crop Block Grant from **USDA-AMS** to utilize natural genetic resources for developing multiple-disease resistant potatoes.
- **Mei-Jun Zhu** (SFS) was awarded a **\$210K** Specialty Crop Block Grant from **USDA-AMS** to validate non-pathogenic surrogates for *Listeria monocytogenes* antimicrobial interventions in fresh apples.
- **Girish Ganjyal** and **Barbara Rasco** (SFS) were awarded a **\$230K** Specialty Crop Block Grant from **USDA-AMS** for food safety training and education for small producers and value-added processors.
- **Markus Keller** (VE) was awarded a **\$245K** Specialty Crop Block Grant from **USDA-AMS** to generate knowledge and recommendations that will empower grape growers to cope with drought and heat.
- **Naidu Rayapati** (PP) was awarded a **\$248K** Specialty Crop Block Grant from **USDA-AMS** to analyze the risks and benefits of top-grafting for vineyard profitability and sustainability.
- **Gary Chastagner** (PP) was awarded a **\$103K** Specialty Crop Block Grant from **USDA-AMS** for management of Botrytis gray mold on conifer nursery stock.
- **Vince Jones, David Crowder, Bill Snyder** (Entomology) and **Carrie Wohleb** (ANR) were awarded a **\$244K** Specialty Crop Block Grant from **USDA-AMS** to expand WSU decision support systems in potato and tree fruit.
- **Tianna DuPont** (ANR) was awarded a **\$247K** Specialty Crop Block Grant from **USDA-AMS** for sustainable management of pests in pears.

## RESEARCH – PUBLICATIONS

CAHNRS faculty published a total of **49** articles in peer-reviewed journals and conference proceedings, which are cataloged online in our Weekly Published Research Archive ([available here](#)). A selection of these publications is provided below with hyperlinks.

### Impactful in Their Fields

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- “Wheat *Fhb1* encodes a chimeric lectin with agglutinin domains and a pore-forming toxin-like domain conferring resistance to Fusarium head blight” NATURE GENETICS – Impact Factor 31.6 – **Michael Pumphrey** and **Kaori Ando** (CSS) ([here](#)), 99<sup>th</sup> percentile journal in Genetics & Heredity
- “The role of federal Renewable Fuel Standards and market structure on the growth of the cellulosic biofuel sector” ENERGY ECONOMICS – Impact Factor 3.5 – **Gregmar Galinato**, **Richard Shumway** and **Jonathan Yoder** (SES) ([here](#)), 94<sup>th</sup> percentile journal in Economics
- “Pressure-temperature-structural distance relationships within Greater Himalayan rocks in eastern Bhutan: implications for emplacement models” JOURNAL OF METAMORPHIC GEOLOGY – Impact Factor 5.2 – **Sean Long** (SoE) ([here](#)), 95<sup>th</sup> percentile journal in Geology
- “EXTRA SPINDLE POLES (Separase) controls anisotropic cell expansion in Norway spruce (*Picea abies*) embryos independently of its role in anaphase progression” NEW PHYTOLOGIST – Impact Factor 7.5 – **Andrei Smertenko** (IBC) ([here](#)), 98<sup>th</sup> percentile journal in Plant Sciences
- “From Mendel’s discovery on pea to today’s plant genetics and breeding” THEORETICAL AND APPLIED GENETICS – Impact Factor 4.1 – **Clarice Coyne** (CSS) ([here](#)), 94<sup>th</sup> percentile journal in Plant Sciences
- “OPDA has key role in regulating plant susceptibility to the root-knot nematode *Meloidogyne hapla* in Arabidopsis” FRONTIERS IN PLANT SCIENCE – Impact Factor 4.5 – **Cynthia Gleason** (PP) ([here](#)), 93<sup>rd</sup> percentile journal in Plant Sciences

### Discovery

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- “Maternal obesity epigenetically alters visceral fat progenitor cell properties in male offspring mice” JOURNAL OF PHYSIOLOGY-LONDON – Impact Factor 4.9 – **Mei-Jun Zhu** (SFS) and **Min Du** (AS) ([here](#))
- “Rice Endosperm Starch Phosphorylase (Pho1) Assembles with Disproportionating Enzyme (Dpe1) to Form a Protein Complex That Enhances Synthesis of Malto-oligosaccharides” JOURNAL OF BIOLOGICAL CHEMISTRY – Impact Factor 4.4 – **Thomas Okita** (IBC) ([here](#))
- “Selection of Reference Genes for Expression Studies of Xenobiotic Adaptation in *Tetranychus urticae*” INTERNATIONAL JOURNAL OF BIOLOGICAL SCIENCES – Impact Factor 4.4 – **Doug Walsh**, **Laura Lavine** and **Fang Zhu** (Entomology) ([here](#))
- “Maternal high-fat diet during lactation impairs thermogenic function of brown adipose tissue in offspring mice” SCIENTIFIC REPORTS – Impact Factor 5.5 – **Mei-Jun Zhu** (SFS), **Dan Rodgers** and **Min Du** (AS) ([here](#))
- “Study of fitness, virulence, and fungicide sensitivity of *Lambertella corni-marisi* causing yellow rot on apple” PLANT DISEASE – Impact Factor 3.1 – **Achour Amiri** (PP) ([here](#))

## Translational and Collaborative

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- “Associations among Wine Grape Microbiome, Metabolome, and Fermentation Behavior Suggest Microbial Contribution to Regional Wine Characteristics” MBIO – Impact Factor 6.8 – **Thomas Collins** (VE) ([here](#))
- “Assessing the potential for niche market development to contribute to farmers’ livelihoods and agrobiodiversity conservation: Insights from the finger millet case study in Nepal” ECOLOGICAL ECONOMICS – Impact Factor 4.2 – **Sajal Sthapit** (PP) ([here](#))
- “Aerial multispectral imaging for crop hail damage assessment in potato” COMPUTERS AND ELECTRONICS IN AGRICULTURE – Impact Factor 2.3 – **Mark Pavek** (Hort.) and **Sinduja Sankaran** (BSE) ([here](#))
- “Characterizing and mapping resistance in synthetic-derived wheat to rhizoctonia root rot in a green bridge environment” PHYTOPATHOLOGY – Impact Factor 3.0 – **Scot Hulbert** (PP) ([here](#))
- “Deficit irrigation alters grapevine growth, physiology, and fruit microclimate” AM. J. ENOL. VITIC. – Impact Factor 1.9 – **Markus Keller** and **Jim Harbertson** (VE) ([here](#))
- “Influence of soft kernel texture on the flour, water absorption, rheology, and baking quality of durum wheat” CEREAL CHEMISTRY – Impact Factor 1.2 – **Alecia Kiszonas** and **Craig Morris** (CSS) ([here](#))

## Books/Articles/Invited Reviews

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- The chapter "A Genuine Path to Rebuilding Sustainable Afghan Cities" by **Bashir Kazimee** (SDC) will appear in forthcoming book *Rebuilding sustainable Afghanistan* by Professor Adenrele Awotona, Director of Center for Rebuilding Sustainable Communities after Disasters (CRSCAD), University of Massachusetts Boston.

## RESEARCH – PATENTS & VARIETIES

- 2016. *Harvesting machine for formally trained orchards*. US Patent # US 2016/0120124 A1. **Manoj Karkee** (BSE)
- Two new potato varieties (Clearwater Russet and Blazer Russet) developed by the Pacific Northwest Potato Variety Development Program (Tri-State program) were accepted by **McDonald's Corporation**. These are added to the list of four main varieties (Russet Burbank, Shepody, Ranger Russet and Umatilla Russet) that can be grown for the restaurant giant's signature French fries. **Rick Knowles** and **Mark Pavek** (Hort.)

## RESEARCH & EXTENSION – EVENTS

### **Organic Orchard Floor Management Workshop Oct 11, 2016 Wenatchee WA**

**Tianna DuPont** (ANR) and **David Granatstein** (ANR), with WSU Extension in Wenatchee, hosted a one-day workshop on organic orchard floor management. This event was in response to the increasing number of growers entering organic tree fruit production, and the greater interest in soils in orchard systems overall. Topics included soil biology, weed control, fertility, rodent control, and irrigation. The afternoon was dedicated to a hands-on field experience with five different aspects of orchard floor management – soil biology, soil organic matter, roots, water, and weeds. The workshop was filled to capacity at 65, with a waiting list of people, indicating a high level of interest in this topic. Preliminary data from organic certifiers in state show a 12% increase in certified organic apple acres in 2016 compared with 2015, surpassing the previous high of 15,735 acres in 2009.

### **“Industry Expansion Bottleneck: Where Will You Get Your Plants?” Oct 27, 2016 Prosser WA**

**Naidu Rayapati** (PP, CPCNW) co-organized a workshop in partnership with Washington Association of Wine Grape Growers, Washington Wine Industry Foundation and Washington Department of Agriculture at The Clore Center, Prosser. About 60 members of the grape and wine grape industry and grapevine nurseries participated in the workshop. **Thomas Henick-Kling, Michelle Moyer** and **Piotr Kowalec** (VE) also gave presentations on virus diseases, impacts of virus diseases on fruit and wine quality and information on grapevine clones and generation of clean plants.

### **Canadian Delegates Tour + Tasting Oct 6, 2016 Richland, WA**

The Washington Wine Commission hosted about 25 wine industry delegates from Canada for a four-day tour of the Washington Wine Industry. On Oct. 6 the Wine Commission brought the group to the Wine Science Center for an educational tour and tasting.

### **Cultural Competency Training Sept 29, 2016**

**José García-Pabón** and the Latino Community Studies and Outreach program conducted a “Why don’t they come...? Increasing Latino Participation in Outreach Programs” training with SNAP-Ed educators on September 29<sup>th</sup>, 2016. This full-day workshop was attended by 18 individuals. The training included an institutional and personal self-assessment; a panel discussion on best practices, a slide show presentation on Edward Hall’s model of “high context and low context cultures”, a “what’s your dilemma” small group activity and another small group activity to design an educational event for Latino families.

## **EXTENSION - HIGHLIGHTS**

- **Chris Mulick, Aaron Esser** and **Paul Carter** met with **Senator and Committee Chair Judy Warnick**, along with representatives of the senate agriculture, water and economic development committee in Davenport at the Wilke farm, to discuss soil acidity and other critical issues facing farmers.
- **Jennifer Leach** was appointed by the Cowlitz County Board of County Commissioners to the Great Rivers Behavioral Health Organization that includes Cowlitz, Lewis, Pacific, and Grays Harbor Counties.
- **Justin Smith**, WSU Extension County Director and an Assistant Professor in CED has been named as the eXtension’s **first eXtension/GODAN Fellow** ([here](#)).
- **Jane Lanigan, AnaMaria Diaz Martinez**, and **Diane Smith** presented at the Scholarly Mentor Program Panel. University of New Mexico Mentor Institute, Albuquerque, NM.

### Publications

- **Elizabeth Weybright, Lauren M. Hrniric , Alison J. White , Melissa M. Cummins , Mary Katherine Deen**, and **Shirley Calodich**. (2016) “I felt really respected and I know she felt respected too”: “Using Youth-Adult Partnerships to Promote Positive Youth Development in 4-H Youth.” *Journal Of Human Sciences And Extension* ([here](#))
- **Gary F. Varrella, Lucky, B. P., Baca, J. S., Peters, C.** (2016). Growing Our Own: A Longitudinal Evaluation of a Professional Development Program for Early-Career 4-H Professionals. *Journal of Extension* 54(5) Article 5FEA2, ([here](#))

### Grant Funding

- **Doreen Hauser-Lindstrom** and **Lee Anne Riddle** were awarded a **\$1.6M** grant for SNAP-Ed FFY17 – Region 3. Washington DSHS-(SNAP-ED ) from **USDA-FNS**.

- **Karen Barale** was awarded a **\$300K** grant for Curriculum Monitoring – WSU from the Washington DSHS-(Community Services Division) **USDA-FNS**.
- **Kevin Wright, Mary Katherine Deen, Jana Ferris, Brian Brandt** and **Elizabeth Weybright** were awarded a **\$173K** Grow Grand for the National 4-H Council supported by **Altria**.
- **Christopher Blodgett** was awarded a **\$57K** grant to support the Seattle Elementary School Mental Health Initiative. Public Health Seattle, King County, **Gates Foundation**.
- **Sandra Brown** was awarded a **\$10K** Worksite Wellness Lifestyle Changes award from the **Foundation Health Gen HHS-CDC**.

#### Awards

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- 2015 National NAE4-HA Citizenship in 4-H Youth Development Award: **Jan Klein, Brian Brandt** and **Rachel George**
- 2015 Western Region for NAE4-HA Awards Communicator Awards:  
Educational Piece: **Mary Katherine Deen** and **Janet Edwards, Mary Arnold** and **Liv Gifford**, Oregon  
Promotional Package: **Lauren Hrcirik, Mary Katherine Deen, Kevin Wright, Suzanne Smith, Sam Tower, Pat Munts, Carey Roos, Darrel Kilgore, Sarah Storm-Tower, Darleen Munson, Andrew Mack, Matt Ziegler** and **Charles Berahino**
- 2015 Western Region for NAE4-HA Specialty Awards:  
Citizenship in 4-H Youth Development Award: **Jan Klein, Brian Brandt** and **Rachel George** (National Award Winner!)  
Excellence in Animal Science: **Mark Heitstuman** and **Janet Schmidt**  
Excellence in Camping: **Mike Jensen**  
Excellence in Urban 4-H Programming: **Scott Van der Wey, Kevin Wright, Dan Teuteberg, Nancy Baskett, Robby Cooper, Ken Turner** and **Jason Clark**  
Search for Excellence in Teen Programming: **Toni Gwin**
- 2015 Western Region for NAE4-HA Service Awards:  
Achievement in Service: **Lauren Hrcirik** and **Natalie Kinion**  
Distinguished Service: **Melissa Cummins** and **Linda McLean**  
Meritorious Service: **Jan Klein**
- 25 Year Service Recognition: **Nancy Baskett, Janet Edwards** and **Jennifer Leach**

### STUDENT NEWS

- High school students from North Central Washington area schools visited the WSU Wenatchee Research and Extension Center on Oct 25, 2016 for interactive sessions with faculty, staff and graduate students. **Kari Sampson** organized this outreach event as part of the Spark Program. Center Director **Jim McFerson** participated in the program, along with **Achour Amiri, Ute Chambers, Tianna DuPont** and **Kate Evans**. Pullman-based CAHNRS faculty/staff included **Candis Carraway, Colette Casavant, Desmond Layne** and **Herb Lengel**.
- **Naidu Rayapati** organized a field trip for 17 students from Chiawana High School, Pasco, to visit IAREC on October 28th. This field trip was organized under the Partners in Science Program funded by M.J. Murdock Charitable Trust to strengthen higher education in STEM fields. The students visited research labs to observe scientific discourse in different disciplines at IAREC and vineyards to observe impacts of viral diseases on grape yield and quality.

- Second year landscape architecture and interior design students traveled to Seattle for a three-day intensive field trip to study contemporary landscape architectural and interior design work. The trip also included intensive job shadow experiences as part of our commitment to connect students to real-world experiences. Meanwhile, six faculty and 89 other third and fourth year students from architecture, interior design, landscape architecture, and construction management traveled to NYC to study transformative and iconic buildings, neighborhoods, and sites at which urban classroom presentations and discussions took place over six days in the city.
- WSU Agriculture Education Students entered the **Teach Ag Commercial Contest** and developed a 30-second video to promote agriculture education. **Their video won, with almost 4,500 views!** Kansas State University was second with nearly 3,000, and Texas A&M third with less than 2,000. Other states competing included University of Nebraska, University of Illinois, Auburn, Purdue, Clemson, Iowa State, Oklahoma State, and the University of Wisconsin. Go Cougs!
- **Suraj Amatya** was awarded the “**2016 Guiseppe Pellizzi Prize**” for his thesis “Detection of Cherry Tree Branches for Automated Sweet-Cherry Harvesting.” The prize is awarded from a global competition of PhD graduates in Agricultural Engineering area. Advisor: **Manoj Karkee (BSE/CPAAS)**
- Congratulations to WSU Entomology Student winners at The ESA/ICE meetings at the XXV International Congress of Entomology in Orlando, FL Sept. 25-30, 2016:
  - **Adekunle Adesanya** won 1<sup>st</sup> place in the PhD student poster for the Acarology and Stored Products Section. Mentors: **Douglas Walsh, Laura Lavine and Fang Zhu**
  - **Paul Chisholm** won 1<sup>st</sup> place in the student oral presentation for the Agricultural and Forest Entomology: Vectors and Others section. Mentor: **David Crowder**
  - **Robert Orpet** won 2<sup>nd</sup> place in the Integrated Pest Management and Sustainable Agriculture: Pest Physiology section, Mentor: **Vincent Jones**
  - **Emily Wine** won 2<sup>nd</sup> place for her poster in the Apidology, Sericulture, and Social Insects: Bees section. Mentor: **Douglas Walsh**
- Three Interior Design students, **Kai Davies, Karli Iseman** and **Coco Ferris**, have been selected as finalists in the CarpetVista International Custom Rug design competition, Sweden. More than 19,000 designs have been entered from 90 countries. Voting is open now. The winners of the competition will be announced on 11/11/2016 ([here](#)).
- **Lei Zhu** (PhD student-BSE) is one of 15 students worldwide who participated in the 2<sup>nd</sup> Summer School on Sustainable Chemistry for Sustainable Development in Lüneburg, Germany. Advisor: **Bin Yang** (BSE)
- **Tim N. Taylor** (PhD Student-Environmental and Natural Resource Sciences) was awarded **Best Graduate Student Poster** at the Washington State Lake Protection Association 29<sup>th</sup> Annual Conference in Bellingham, WA “Evaluating the Precision of Lake-Dwelling Brook Trout Age Structure.”
- The career networking night for CAHNRS, and the career fairs at both UI and WSU were well attended by SFS students in October. In addition to meeting with representatives of firms at the career fair events including [EcoLab](#), and [Basic American Foods](#), [Darigold](#) and [E&J Gallo](#) discussed internship and career opportunities with our students in clubs and classes. [Our partners include Land O Lakes, Starbucks, Tillamook Kraft, Leprino, Hilmar, Dean Foods, and others who have reached out to us for student interns and employees.](#)
- CSS will send 24 graduate and undergraduate students to the 2016 Washington Tilth Conference Nov 11-13 in Wenatchee.

### **Custom EnviroPak Smokehouse (SFS)**

The School of Food Science is receiving a custom-made EnviroPak smokehouse with a value in excess of \$200K. The unit is completely portable and will be used to teach food smoking processes for meat, fish and dairy around the region. The smoker will also be used in food processing and process controls classes taught by **Frank Younce** and others along with research within the School on smoked and cured foods.

### **Notes on the Creamery Expansion (SFS)**

The concrete pad for the receiving bay and roof installation is starting this week. Design details are being clarified including electrical conduit including use of stainless steel in exposed areas. Some of the details are coming into focus such as paint and the location of data ports. Most of these are on the outlined in the build plan, but some clarification is needed. We are waiting to confirm a tour of the Creamery facility with key stakeholders in the Washington dairy industry on November 12.

### **South Seattle Community College (VE)**

**Thomas Henick-Kling** and members of the WSU Tri-Cities admission and academic affairs team visited with academic advisors at South Seattle Community College on October 20. This trip provided WSU faculty and staff with an opportunity to share information about the VE Program and build a stronger partnership that drives SSCC VE students who want to earn bachelors and graduate degrees to WSU.

### **Fostering industry relationships leads to rewards for CM students (SDC)**

The Construction Management program recently received a pledge for \$75k from PCL Construction – their largest donation to the program to date, with funding provided for extracurricular opportunities for students such as conferences and student competitions and physical and technological upgrades associated with the program’s commitment to BIM education. These industry relationships ensure that recruitment within the program continues to be strong with approximately 90% of our certified students getting internships and 100% of our graduates finding full-time employment.

### **WSU/UW Ruckelshaus Center**

The 2016 Chairman’s Circle Luncheon gathered an influential audience of more than 300, brought in over \$80K in sponsorships, and over \$20K in day-of-event donations (which more than doubled our previous high). The Center just executed a contract for \$54K with the WA Department of Ecology to conduct an assessment identifying the organizational elements needed to create a long-term resilience strategy for the Washington coast. **Amanda Murphy** is the PI, with **Phyllis Shulman** as Co-PI. The Center released its assessment of issues, opportunities and dynamics among key parties, to assist the Snohomish Health District in navigating a potential transformation of its governance and delivery of care. The assessment was well-received and is already helping inform and shape a series of next steps.

### **NARA Prepares for First Flight Using BioJet**

The Northwest Area Renewables Alliance is preparing for its first flight using BioJet made from wood. WSU is the lead institution on this **\$40M** grant from **USDA-BRDI** (2011), one of the largest in history of the agency. The outreach team has put together a timeline that tracks the production of 1000 gallons of BioJet fuel produced from post-harvest forest residuals ([here](#)), as well as a video “Slashing America’s Carbon Footprint: An Emerging Biofuel Source” that conveys why biofuels play a critical role and the significance of the NARA project ([here](#)), and four educational videos for K-12 teachers and students.