On my first day as the Dean of WSU’s College of Agricultural, Human, and Natural Resource Sciences, I received a “first day of school” gift from my tree fruit colleagues: a perfect Cosmic Crisp apple. Everything about the stars shining on its bright surface indicated that the apple will indeed take its place among the college’s crowning achievements.

It seems fitting that this would be my introduction to one of the most important working relationships we have in CAHNRS. As a multi-billion-dollar economic driver, the importance of Washington’s tree fruit industry cannot be overstated, and I consider it a great privilege to lead CAHNRS at a time when our industry partnership is on the cusp of bearing such historic fruit.

We have made history because we have worked together. The endowment has allowed us to create a world-class team of researchers and make critical facilities upgrades, and, in turn, it has better prepared us to provide vital support to the tree fruit industry. This partnership and the important work we do together is at the forefront of my strategic leadership priorities, and it is with genuine gratitude—to the Washington Tree Fruit Research Commission, the Endowment Advisory Committee, and every Washington grower that we serve—that I pledge my support.

André-Denis Wright, CAHNRS Dean
**FINANCIAL OVERVIEW**

**TREE FRUIT ENDOWMENT**

The $32 million tree fruit endowment enables WSU to continue the research and innovation essential to our role in supporting the state’s multi-billion-dollar tree fruit industry. This historic gift, the largest in WSU history, provides critical funding for Faculty Endowed Chair Positions, Information and Technology Transfer (Extension), and Development of Research Orchards and Facilities.

**HOW DOES THE TREE FRUIT ENDOWMENT WORK?**

The tree fruit endowment was created to provide a dependable, perpetual source of funding. The endowment’s principal is invested, and a portion of the growth on that investment, typically 4%, is paid out annually to fund strategic tree fruit initiatives identified in collaboration with the Tree Fruit Endowment Advisory Committee. The remainder is reinvested, ensuring growth and maintaining its spending power as a dedicated source of tree fruit funding in perpetuity.

**HOW ENDOWMENTS GROW**

**CONTRIBUTIONS BY COMMODITY**

<table>
<thead>
<tr>
<th>Fruit</th>
<th>As of June 30, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple</td>
<td>$19,300,836.45</td>
</tr>
<tr>
<td>Pear</td>
<td>$2,064,278.45</td>
</tr>
<tr>
<td>Cherry</td>
<td>$4,232,746.75</td>
</tr>
<tr>
<td>Stone Fruit</td>
<td>$162,846.28</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$25,760,707.93</td>
</tr>
</tbody>
</table>

**ENDOWMENT TOTALS**

<table>
<thead>
<tr>
<th>Principal Balance of Endowments</th>
<th>Total Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future Endowed Chair</td>
<td>$2,000,000.00</td>
</tr>
<tr>
<td>ITT (Extension)</td>
<td>$12,000,000.00</td>
</tr>
<tr>
<td>Orchard &amp; Facilities</td>
<td>$8,000,000.00</td>
</tr>
<tr>
<td>Physiology Faculty Chair</td>
<td>$2,000,000.00</td>
</tr>
<tr>
<td>Postharvest Faculty Chair</td>
<td>$2,000,000.00</td>
</tr>
<tr>
<td>Soil &amp; Rhizosphere Faculty Chair</td>
<td>$2,000,000.00</td>
</tr>
</tbody>
</table>
Dr. Musacchi works closely with growers and stakeholders to:

- Develop sustainable and innovative orchard management practices to optimize fruit yield.
- Understand the mechanisms by which various management practices and environmental stressors interact to affect tree physiology, yield, and fruit quality.
- Design and introduce new orchard systems that are more innovative, productive, sustainable, and profitable.

Measures of success:

- Pruning techniques developed by Musacchi to minimize blind wood (e.g., click pruning combined with girdling) can increase production by up to 20 bins per acre. With 9 million WA38 trees on the market in the next 5 years and an average planting density of 1,500 trees per acre, 6,000 new acres will be planted. The increase in value would be $60–$96 million yearly depending on the selling price ($500–$800 per bin).
- Created 28 peer reviewed publications in 5 years.
- $2.49M in funding for WSU Tree Fruit Physiology and Management projects, as part of $8.78M in collaborative research.
Karen Lewis leads the WSU Tree Fruit Team, which includes Faith Critzer, Tianna DuPont, Gary Grove, Gwen Hoheisel, Wendy Jones, Jim McFerson, Bernardita Sallato, Tory Schmidt (WTFRC) and Ashley Thompson (OSU).

The Tree Fruit Team’s collective goal is to effectively communicate with industry through:

- Treefruit.wsu.edu website
- Social media
- Fruit Matters newsletter
- Extension education events and publications

Measures of success:

- From Sept. 2017 to Sept. 2018 users and sessions on the treefruit.wsu.edu website increased 244% and 221% respectively.
- Page views climbed to 307,026.
- Mobile and tablet connection to the website increased 109% and 88% respectively.
- The Fruit Matters newsletter currently has 1,520 subscribers.

FINANCIALS: 6/30/18

Principal Value ......................... $8,695,952.08
Market Value ......................... $9,066,602.66
Dr. Tobin Northfield has been recruited to lead a program in integrated insect pest management starting in Fall 2018. Facilities upgrades, made possible by the Tree Fruit Endowment, will enable Dr. Northfield to quickly establish a dynamic program addressing industry pest management priorities. The upgraded Entomology IPM Lab enhances Dr. Northfield’s ability to train graduate students working on applied problems and will enable cutting edge research in insect behavior and biocontrol to address industry needs and compete for external funding.

Dr. Faith Critzer joined WSU Prosser in January 2018 to enhance research capacity on food safety and risks of foodborne pathogens during production, harvest, and storage of fresh produce. The Tree Fruit Endowment provided $100,000 for establishing a standalone Bio-Safety Level-2 (BSL-2) lab facility to address food safety needs of the WA tree fruit industry. The funding support will enhance Dr. Critzer’s research capacity to:

- Advance our knowledge of foodborne pathogens of importance to the tree fruit industry.
- Deploy research-based strategies to keep harmful pathogens out of the food supply chain.
- Conduct strategic research on validation of inactivation treatments; survival of foodborne pathogens in common growing, holding and processing conditions.
- Compare non-pathogenic surrogates to pathogens for use in field settings.

PhD student Alexis Hamilton and Dr. Faith Critzer enumerate indicator organisms from packinghouse samples. Their study aims to ensure equipment cleanliness.

FINANCIALS: 6/30/18

Principal Value .............................................. $8,000,000.00  
Market Value ................................................... $8,284,017.86
In September 2018, two more applicants were interviewed for the Endowed Chair in Tree Fruit Soil and Rhizosphere Science.

Dr. Carolina Torres has accepted the position of Endowed Chair in Postharvest Systems and will arrive in Wenatchee to begin in early February 2019. Dr. Torres has extensive experience in understanding how pre-harvest environmental and physiological factors affect fruit quality and physiological disorder development postharvest using a variety of phenomic, metabolomic and genomic tools.

Funding for a fourth endowed chair is now available. The WSU Tree Fruit Endowment Advisory Committee (EAC) will meet to discuss the area of highest academic need identified by the industry. Once the area of concentration is identified, the EAC will work with WSU to prepare a gift use agreement and notice of vacancy for the position. The anticipated timeline for beginning recruitment is July 1, 2019.
Based upon projections provided by the Washington Tree Fruit Research Commission, it is anticipated that the special assessment to support the WSU Tree Fruit Endowment will be finished in December, 2019. This is a projection, and the assessment will conclude when the actual contributions reach the original $32M goal.

If you have questions about these graphs or the projections reported, please contact Mike Willett or Ines Hanrahan, (509) 665-8271.

Actual and projected income into the 2019 crop year for the $32 million WSU Tree Fruit Endowment special assessment for tree fruit research, extension activities, and facilities improvement. The inset provides a projection of the month and year collections will cease for the fruits listed.

Actual and projected assessment collection by crop and year for the WSU Tree Fruit Endowment special assessment. The special assessment will cease when total assessments reach $32 million.