

Oregon State University  
**College of Agricultural Sciences**





**Oregon State  
University**



**Bill Boggess  
Executive Associate Dean**

**House Agriculture and Natural Resources Committee  
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# Characteristics of Oregon's Fermentation Industries

- Value added industries that add anywhere from two- to thirty-times the value of the base ingredients
- Market premium quality, differentiated products at relatively high price points
- Depend on premium quality, Oregon-grown inputs (exclusively in many cases)
- Experienced rapid (double-digit) growth over the past decade





# Fermentation Sciences *Characteristics*



Broadest in the nation, mirroring the diversity of Oregon

Three missions: research, outreach, teaching/workforce development

Comprehensive: soil to shelf to palate

Double digit industry growth and demand for research, outreach and graduates





# Program Breadth

## *Agricultural Inputs*

Grapes

Milk

Barley, malt, hops

Barley/Wheat

Fruits

## *Products*

Wine

Cheese/Yogurt

Beer

Bread

Spirits/Cider



Fermentation  
Sciences

# Technical Underpinnings

## Applied Economics

*Business, marketing*

## Animal & Rangeland Sciences

*Dairy research, operations*

## Chemistry/Sensory

*Analytical and flavor chemistry*

*Sensory*

## Crop & Soil Science

*Breeding: hops, barley, wheat*

## Food Science & Technology

*Enology, brewing, cheese, bread*

## Horticulture

*Viticulture, small fruits, IPM*

## Microbiology

*Fermentation microbiology*

## Genomics



# Workforce Development



Photos: Lynn Ketchum

# Today's Lineup

- Introduction/Overview: Bill Boggess
- Milk/Cheese/Yogurt: Robin Frojen and Dirk Davis
- Hops/Barley/Beer: Jeff Clawson and Jeff Edgerton.
- Grapes/Wine: Mark Chien and Sam Tannahill
- Workforce development: Bob McGorrin and Parker Cooper
- Questions/follow up with the Committee.





