

#### 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** 

**Products** 

Grapes

Wine

Milk

Cheese/Yogurt

Barley, malt, hops

Beer

Barley/Wheat

Bread

**Fruits** 

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

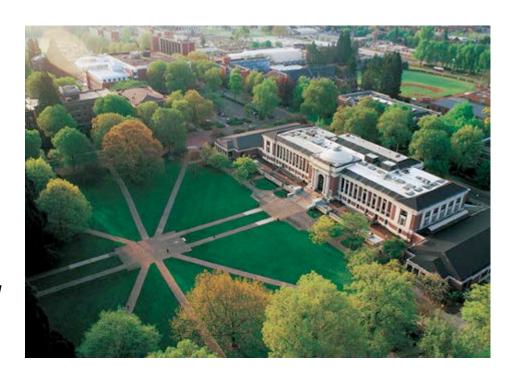
**Horticulture** 

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.

