For more than 150 years, we have stood at the crossroads of conservation and production, innovating new ways to advance the future of agriculture and natural resources.

We partner with industries and communities each day to help the economy and all people thrive.

The 2020 fiscal year presented unprecedented challenges. And with those challenges, unprecedented opportunities.

Now more than ever, we are committed to our tireless pursuit to make tomorrow better.
2020 AT A GLANCE

$91M in research expenditures

$62.6M in research grants

22% growth in research grants over FY2019

4 of our faculty noted as the most cited researchers in the world, ranking in the top one percent

9th ranked in the US for agriculture and forestry
The accomplishments of the College of Agricultural Sciences during 2020 would be considered noteworthy in any year. Set against the backdrop of a pandemic and wildfires that ravaged much of our agricultural and natural resource lands, makes this truly remarkable.

The majority of Clarivate's most highly cited global researchers in the state last year came from our College. Our Fisheries and Wildlife Department won the Online Learning Consortium's prestigious John R. Bourne Outstanding Online Program Award – one of only two programs in the nation to do so. We had one of the most successful years of research in the College's history – growing our research grant funding to $62.6, an increase of 22% over 2019.

We also defined four core areas of strength that will direct our future strategies. These include: agricultural competitiveness and resilience; food innovation for health, markets and access; working and natural landscapes; and coastal food systems and conservation.

And finally, we launched a new Climate, Diversity and Inclusion taskforce. This group will actively work on developing strategies that promote sustainable programs to improve access and visibility for underrepresented communities in agriculture and natural resources, here in the College and beyond.

All of this was done navigating a pandemic that required us to rethink everything about how we delivered our land grant mission of teaching, research, and extension.

I am honored to serve as the leader of the College of Agricultural Sciences, not only because of the breadth of our accomplishments, but also because of the character of our people. It is nearly impossible to shine a light on the heroic efforts our faculty, staff and students displayed this past year. We continually found ways to transform challenges into opportunities in our unrelenting commitment to make tomorrow better.

Alan Sams
Reub Long Dean and Director
College of Agricultural Sciences
Oregon Agricultural Experiment Station
TEACHING

The College of Agricultural Sciences has always been deeply committed to offering our students diverse educational opportunities. In the classroom, in the lab, in the field, around the world, and in remote online environments.

This past year, our students were able to broaden their educational experiences with internships and research opportunities that made them more competitive in the job market as they start their professional careers. Many students conducted research that led them to consider a career in scientific research for the first time. Others found mentors in Extension who gave them opportunities to apply discovery to serving communities.

They also took part in more than 30 College clubs and took on leadership roles at national organizations representing Oregon State University as officers in both MANNRS (Minorities in Agriculture, Natural Resources and Related Sciences) and Future Farmers of America (FFA).

And in March, our faculty pivoted their teaching to a remote environment in less than two weeks, converting experiential learning-rich curriculum to a virtual environment so that our students could still graduate on time.
$425K
Scholarships awarded

418
Bachelor’s Degree graduates

51
Certificates

75
Master’s degree graduates

36
PhD graduates

3,000
students enrolled

One of only two programs in the nation to win the online learning consortium’s prestigious John R. Bourne Outstanding Online Program Award for teaching

Pivoting to a Remote Teaching Environment

- 600 vials of wine shipped to students in a Wine Production, Analysis and Sensory Evaluation class
- Canning equipment hand delivered to the doorsteps of graduate students in a food preservation class
- Students grew a variety of plants and crops in everything from containers in small apartments to their grandmother’s garden
- Students learned soil science by studying samples dug in their own yard, field, park or neighborhood
Research at the College of Agricultural Sciences provides critical insights for the state’s largest economic engine.

Agriculture in Oregon is estimated to produce $50 billion in annual economic impact, and 1 out of 12 people in Oregon work in agriculture.

Some of the most recognized research conducted last year includes:

- Partnering with the wine industry to address smoke effects on grapes as a result of record wildfires.
- Revolutionizing agricultural land use policy and farming by developing “agrivoltaics” – a new method of farming under solar panels which improves crop growth and generates power to the grid.
- Harnessing energy production from bacteria through new microbial fuel cells.
- Developing new types of foods that help in the treatment of disease or in rehabilitation.
- Discovering new methods for natural control of spotted wing drosophila, a devastating insect for many fruit crops.
- Mapping the hemp genome to unlock its many secrets and uses, making it easier to capitalize on new opportunities for this emerging commodity.
- Developing new methods to keep honeybees healthy and expanding our Master Beekeeper Program with 225,000 downloads of its podcast across 130 countries.
- Discovering a new species of truffle.
- Hosting two national centers on environmental health and toxicology.
RESEARCH

2020 was the most productive research year in the history of the College of Agricultural Sciences. With a growth of more than 22% over last year, research funding increased to $62.3 Million.

In FY20 our researchers found ways for farmland to fix solar’s real estate problem with advances in agrivoltaics that both improve crop production and create energy. We partnered with both the wine and hemp industries to measure the impact of wildfire smoke on crops. We uncovered new ways of learning how to manage the increasing number of invasive species. We applied big data to address societal challenges including earthquake preparedness, securing electrical power systems and improving environmental health.

Our researchers continued to be tapped for national and international collaborative projects. We joined a global effort to save the Chinese crested tern – a critically endangered seabird. We collaborated with the National Institutes of Health’s National COVID Cohort Collaborative to harness nationwide COVID-19 patient data to speed treatments.

In addition, two of our researchers were named Fellows of the American Association for the Advancement of Science and another was named a Fellow of the American Geophysical Union (AGU).
Our Extension efforts in 2020 reached milestone moments as we doubled down in our mission to help Oregonians facing unprecedented health and market challenges.

Two-years in the making, in 2020 we established the Western Cover Crop Council (WCCC) to facilitate and enhance communication and collaboration among farmers and growers.

Our Master Gardener Program in 27 of Oregon’s 36 counties conducted trainings and supported gardening education in community, school and hospital gardens, collaborating with food banks, correctional facilities, veterans groups and underserved communities. And when the program was forced to pivot online, more than 40,000 people across the country signed up to learn how to grow their own food.

We partnered with the Vale District BLM and USDA-ARS scientists to launch a research and extension project on 25,000 acres of public lands to address fuels management in the dormant grazing season, curbing annual grass invasion and wildfires.
We helped to expand the nationwide Beef Quality Assurance program to Oregon cattle producers to promote the production of safe and wholesome beef, certifying 80 cow-calf operations and 12 feed yard operators, representing a capacity of 100,000 fed cattle.

Ninety food safety specialists from 15 Western states and territories attended the virtual annual conference led by the College’s Western Regional Center to Enhance Food Safety.

We created resources with information and fact sheets about the pandemic in relation to food operations, including farms, gardens, fresh produce, food banks, food service, grocery stores and home/community.

Our Small Farms program quickly created a website in English and Spanish called Small Farms, Local Food and COVID-19.

On the Oregon coast, Lincoln County Extension launched a website to connect residents directly with local food producers.

We rallied our many networks of farmers, ranchers and other agricultural leaders to collect and distribute donated hay during the wildfires to feed displaced livestock.