



OneScience: A strong, diverse, cohesive science community—faculty, staff, alumni and friends—who are committed to working together to achieve a set of common goals that foster the academic, personal and professional growth of all its members.



I am proud to present *LEAD (Learn, Engage, Achieve, Discover): Global Excellence in Science*, the 2015–2020 Strategic Plan for the College of Science. A blueprint for global excellence, this plan will guide our priorities and inform our decisions about how best to innovate in science education, to prepare students to be leaders in science, to foster impactful discoveries and to improve our world.

We are deeply committed to our core values of **excellence, diversity and harmony**. The College is where people discover science and also learn to be ethical global citizens. Enabling the success of our people is a cornerstone of this plan and is important to me personally. Science faculty are the foundation of the university and by investing in them, we can truly transform lives.

By building a better environment and a strong community, we will foster the innovative and critical thinking of future generations and lay a strong foundation for new technologies. Our excellence in fundamental and curiosity-inspired research will enable us to solve major societal problems to make our state, nation and world better.

Together we can make the College of Science at OSU one of the best in the world for its research and education and for being a diverse and inclusive place of choice. I welcome you to join us as we LEAD Oregon State toward global excellence in science!

Sastry G. Pantula

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Dean, College of Science





COLLEGE OF SCIENCE

WHO WE ARE

For nearly a century, Oregon State University College of Science has thrived through intellectual exploration, the quest for new knowledge, translation of discoveries into good use, solutions to the most pressing problems of our time and communication of fascinating science across Oregon, the nation and the world.

As scientists, we are driven to understand how the world works. We pursue both curiosity-driven, fundamental research to better understand the broader world and use-inspired research to tackle some of the grand challenges of science, engineering, business and education.

WE VALUE...

- » **Our people**—our students, faculty, staff, alumni—and their successes.
- » **Fundamental research** for a better future.
- » **Collaboration** to solve the world's problems and create opportunities.
- » **Meaningful experiences** that transform lives.
- » **Outstanding teaching** for engaging learners.
- » **Diversity** to build the best teams to do the best science.
- » An **inclusive** community.
- » Scientific **literacy** for all.

OUR GOALS

We have three major goals and a set of strategies to advance the plan and support our people, our planet and our prosperity.

Goal 1. To build a diverse and inclusive science community focused on excellence.

Goal 2. To be a global leader in scientific research and scholarship for a better world.

Goal 3. To excel in outreach, engagement, visibility and economic development.

STRATEGIC OPPORTUNITIES

Our distinction lies in the depth of our intellectual engagement and the breadth of our scholarly work in the life, physical, mathematical and computational sciences. Through investments in these areas, we will inspire and build leaders in science.

Marine Science. We will leverage our top ranked programs and internationally recognized research and faculty to be a leader in OSU's Marine Studies Initiative. We are well positioned to address problems ranging from climate change and ocean acidification to diseases, loss of biodiversity and pollution. Our efforts will sustain healthy, productive and resilient marine, freshwater and terrestrial ecosystems.

Sustainable Materials. We will build on our leadership in materials science to discover sustainable materials for next-generation electronics and to develop techniques for clean energy generation and conservation. We will advance sustainability by creating new technologies and building new companies while training the next generation of environmentally conscious innovators.

Biohealth Science. Our faculty are leaders in fundamental, quantitative and translational research relevant to fighting disease and promoting health. From molecules and model systems to studies of humans, we will accelerate discovery, advance understanding and grow our global impact.

Data Science. Data are increasing in velocity, volume and variety. Big data analyses lead to breakthroughs

in areas from personalized medicine to precision agriculture, marketing to security, environment to education, and astronomy to information-based industries. As a data science hub for research and training, we will be a key resource for data-enabled research, analysis and visualization at OSU, in Oregon and across the country.

OUR FORECAST

We will show evidence that ALL our students are well-educated and **successful**.

We will have an **exceptional** professional development program for ALL our people and an innovative career preparation program for our students.

We will be recognized for our global **expertise** in marine, environmental, materials and biohealth sciences.

We will have made **bold steps** to establish a world-class data science research that will support computational, data-enabled discoveries at OSU and a training program that will educate the next generation of data scientists to meet global workforce needs.

We will enhance science literacy and guide science-based **public policy**.

We will have strong, healthy **partnerships** with alumni and industry.

We will be a community that respects **diversity** of opinion, skill set, gender, race, and ethnicity as underpinnings for personal and professional success.



Claire Skach ('15, B.S., Biology), photo by Nicki Silva