

The Oregon State University Research Agenda

Overview OSU research, rich and extraordinarily diverse, has significant impact on Oregon and the world. This research agenda consists of statements of values, principles and research thrusts that provide the foundation for OSU's research enterprise.

The Challenge The OSU research portfolio has grown dramatically over the last decade as a result of the initiative and quality of the University's faculty, staff and students. Continued expansion of research at OSU will depend on our ability to create and support core capabilities and commit resources to hire and retain the best faculty. We must foster a climate that rewards creative, high-impact research. Our research must improve fundamental understanding, create solutions to global challenges and address emerging opportunities while aligning with funding sources.

Our Values The OSU research community, a vibrant group of faculty, staff and students, shares values that establish the culture and foundation upon which we build our agenda. We value collaboration, open mindedness, authenticity, curiosity, knowledge creation, creativity, integrity, collegiality, and an entrepreneurial spirit. These values have served us well through the years; the research agenda will reinforce them. OSU research emphasizes:

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| RELEVANCE | We create high impact solutions to the pressing needs of local and global communities in order to ensure a healthy and sustainable world. |
| INTEGRATION | Our transdisciplinary ^[1] research addresses needs with transformative approaches, both basic and applied, both short-term and long-term. |
| COLLABORATION | We collaborate locally, nationally and internationally with communities, industries, academia, and the public and private sector. |
| LEADERSHIP | We lead the research community and educate and mentor the next generation of leaders. |
| ACCESSIBILITY | We openly exchange ideas, approaches, data and results while protecting intellectual property. |

Our Principles At the heart of the research agenda are the principles that guide our research investment decisions. These principles complement and align with our values and the goals outlined in the strategic plan. The four principles serve as the compass for OSU's future research investment:

1. OSU will support innovative and flexible organizational structures to enable a diverse portfolio of both individual and team-based research.
2. OSU's programs will be models for Land, Space, Sea and Sun Grant institutions in the 21st Century. OSU's research will
 - a. Include a healthy spectrum of fundamental and applied research that enhances knowledge creation, the wellbeing of people, the environment, and the economy in the state of Oregon, the nation, and the world; and
 - b. Integrate with undergraduate and graduate education to develop emerging leaders and sustain a work force that meets the current and anticipated employment needs; and
 - c. Create and sustain partnerships with communities, agencies and businesses through outreach and engagement to solve critical social and environmental problems and support economic vitality.

[1] Transdisciplinary research "implies the conception of research questions that transcend the individual departments or specialized knowledge bases because they are intended to solve research questions that are, by definition, beyond the purview of the individual disciplines" (*Who Will Keep the Public Healthy? Educating Health Professionals for the 21st Century*, Institute of Medicine. 2003. Washington, DC: The National Academies Press.)

3. OSU's research programs will be highly competitive for private and public funding. To do this, OSU will
 - a. Promote and invest in transdisciplinary, transformational and high risk research.
 - b. Actively engage with public and private sponsors to help influence future funding trends and opportunities.
 - c. Seek collaborative opportunities from all sectors including academic, industrial, governmental and non-governmental.
 - d. Work to minimize barriers to collaborative research, both internally and with external partners.

4. OSU will enhance the professional growth opportunities and workplace climate for all members of the University research community. OSU will
 - a. Recognize research contributions and achievements.
 - b. Foster leadership development of students, faculty and staff at all levels.
 - c. Enhance opportunities for research support for faculty and students by promoting transdisciplinary research and creative activities.
 - d. Work to enhance communication across disciplines, thereby enhancing not only the research enterprise but also the campus climate and acceptance of diverse perspectives.

OSU's Research Thrusts OSU's Strategic Plan focuses on three Signature Areas of Distinction

“Advancing the Science of Sustainable Earth Ecosystems; Improving Human Health and Wellness; and Promoting Economic Growth and Social Progress. All three build upon the University's core teaching and research strengths, the skill and capacities of its faculty, and OSU's many established national and international partnerships and collaborations. Collectively, the Signature Areas represent OSU's greatest opportunity to lead in solving complex societal problems and to creating superior learning opportunities for students...”^[2]

These Signature Areas invoke a rich and complex set of research opportunities that can be captured in highly integrative and overarching research thrusts.

- **How do natural systems work and how can we live sustainably within them?**
- **What factors and systems influence and promote health, wellness and long-term quality of life?**
- **What fundamental understanding, discoveries and solutions are needed to advance economic and social well being?**

This research agenda is an important part of the framework defining the **21st century OSU land grant** mission:

“As a land grant institution committed to teaching, research, and outreach and engagement, Oregon State University promotes economic, social, cultural and environmental progress for the people of Oregon, the nation and the world. This mission is achieved by producing graduates competitive in the global economy, supporting a continuous search for new knowledge and solutions, and maintaining a rigorous focus on academic excellence...”²

In moving forward with this research agenda, invoking the values and principles identified above, and addressing the critical research thrusts, we will ensure that our mission is met.