

Research Office FY17 Results

The OSU Research Office (RO) is charged with supporting all aspects of the research enterprise. In the fiscal year ending June 30, 2017, OSU faculty and staff earned \$441million in research grants, contracts and licensing revenue. As research investments mount, the RO's greatest challenge is understanding how best to support to a world-class research enterprise on a middle class budget. This requires ingenuity, discipline and grit. What follows below is evidence that the RO is up to the task.

Planning

The RO has completed a draft of a work plan. The RO launched a strategic planning process in spring 2016 with the formation of a Research Office Advisory Committee (ROAC). The ROAC consists of a small group of distinguished researchers and research administrators from across the United States. Advice from the committee was instrumental in the process that rolled out over the course of the last year. RO leadership met with all RO staff, including center and institute directors, distinguished faculty, faculty, and post-doctoral fellows. In all, nearly 200 members of the OSU research community participated in small group discussions with RO leadership. The outreach resulted in a draft plan that sets priorities for all for units within the RO, and will guide me in investments of staff time and discretionary funds. This work will be finalized after open forums with faculty researchers, the Provost's Council, and the Research Council of the Faculty Senate. An outline of the plan will be distributed to the OSU research community in early October. The RO work plan is the first such plan for the Research Office and constitutes a major administrative advance in the office.

Revenue

OSU earned another year of record-breaking research revenue in FY17 totaling more than \$441M in research awards, contracts and licensing fees. The FY17 increase was fueled by two major infrastructure awards in marine research: the first of three Regional Class Research Vessels (\$123M), and Implementation Phase I of the wave energy test bed at Newport, OR (\$34M).

Infrastructure

OSU's executive audit committee identified the lack of quality research space as a top risk to the institution. A recent report by Sightlines, a third party consultant, estimates OSU's deferred maintenance price tag at approximately \$1B. In FY17, the Research Office worked closely with the Office of Finance and Administration (OFA) to align priorities for investments in research infrastructure. In FY17, the RO pushed

forward a complex deal to build-out 27,000 sq ft of research space on the HP campus. BLDG 11 on the HP campus currently houses 11 start-ups linked to OSU technologies and will be the new home of RAPID, a newly funded Department of Energy National Network for Manufacturing Innovation (DOE NNMI) award (\$9M), and the OSU business accelerator, Advantage Accelerator. Combining these programs in the presence of growing OSU start-up companies, most notably, Inpria and Valliscor, will provide additional momentum to the entrepreneurship dynamic evolving in the region. The BLDG 11 deal leveraged resources from OSU's RO, COE and OFA, with lease fees from OSU start-ups to design, negotiate and finance the facilities improvements. Improvements to the space will be completed in late 2018.

Partnerships

OSU research benefits from close partnerships in both the public and private sectors. Our partners include national laboratories, research institutes, defense agencies, industry, and universities, who provide research funding and expertise, access to emerging technologies, and jobs for OSU graduates. Of the partnerships forged and tested in the last year, the RO's most hard-earned win was the Oregon Manufacturing Innovation Center (OMIC). OMIC is a consortium of university, trade school, industry, and government interests designed and funded by the state of Oregon to advance the aerospace industry in Oregon. The OSU RO and Office of the General Counsel ended a stalemate among consortium members by brokering terms for a membership and operating agreements. Under intense scrutiny by the consortium's lead legislative proponent, we managed the discussions to optimize benefits to OSU COE and minimize the university's liability and exposure. Agreement on terms led to a subsequent investment of \$12M (net) by Oregon legislators.

Commercialization

OSU's Office of Commercialization and Corporate Development (OCCD) continues to earn major wins through its start-ups. Inpria, a spin out of Doug Keszler, (COS, Chemistry) pulled in a \$24M investment in FY17, and will be retained in Corvallis with the build out of the BLDG 11 on the HP campus. NuScale continues its push to build out a demonstration plant adjacent to the Idaho National Lab in Idaho Falls, an effort that would lead to a \$6B economic impact on the region. Outset Medical raised a \$74.5M round to support Tablo, it's all-in-one hemodialysis system. Additional companies spinning out of OSU technologies and verging on wins are eChemion, Agility Robotics, and NW Medical Isotopes.

Reputation

The RO has begun a push to grow national and international recognition of OSU as a major research institution, and to quantify and market the economic impact of OSU research. In FY17, the RO joined the CleanTech Alliance, a trade organization headquartered in Seattle, which represents a network of business and industry interests promoting emerging energy technologies. Affiliation with the Alliance led to involvement in the Pacific NorthWest Economic Region (PNWER) conference, and links with the Cascadia Innovation Network. Cascadia plans major infrastructure investments to create a technology corridor extending from Vancouver, B.C. to Portland, Oregon. OSU's engagement would be designed to pull the axis of the corridor south to Corvallis. The RO has also joined the Institute for Research on Innovation & Science (IRIS), a consortium of public and private institutions exploring big data approaches to quantifying research impact. IRIS links university research expenditures to U.S. Census Bureau data to quantify the regional and national economic impacts of OSU research. OSU's first data tranche is scheduled for November 2017.

Research Office FY18 Work Plan

OSU has enjoyed three consecutive years of record-setting research revenue. Aging infrastructure, dated administrative policies, and inadequate resources to attract and retain top caliber faculty researchers will limit further growth. Balancing the sizable push for increased research activity with the institution's aging infrastructure and burdensome administration shape the plan for the year ahead. RO key initiatives being finalized for an FY18-23 Work Plan and are below are arranged by strategic outcomes and proximate objectives, as developed in the RO strategic plan.

Outcome 1: Secure new revenue to advance the research mission.

Actions:

- Aggressively negotiate OSU's federal Facilities and Administration (F&A) rate. ☐
- Investigate university fee-setting processes and process improvements.
- Strengthen partnerships with national labs of the Pacific Northwest to support mission-critical research.

Outcome 2: Modernize infrastructure and business operations linked to research.

Actions: ☐

- Build, buy or rent space to improve the overall quality of research space available to OSU researchers.
- Implement electronic research administration systems for the Office of Research Integrity, and integrate it with other RO systems.
- Implement SB214, new Oregon law that permits re-establishment of the post-doctoral scholars program.
- Establish a model for high-level, dedicated administrative support for large, multi-stakeholder projects following the pilot currently in place for Ship Operations and the RCRV project. ☐
- Add key staff to develop federal and industry research strategy, bolster research compliance, ☐and integrate research activities across campus. ☐

Outcome 3: Leverage public and private partnerships to broaden the impact of research.

Actions: ☒

- Pursue strategic partnerships with national labs to leverage university assets and create opportunity for student researchers.
- Develop best practices for industry consortiums and support their implementation across campus.
- Formulate a research strategy for OSU research that capitalizes on assets available in the Portland metro area.
- Work closely with state economic development agencies to translate research outcomes into economic impact.

Outcome 4: Engage the larger community to broaden the impacts of research.

Actions:

- Build out BLDG 11 at the HP campus to create a venue in which industry, university and government agencies may work together to drive economic gains for the state and the nation.
- Campaign for recognition of technology development and industry engagement in university and college strategic plans and promotion and tenure document.
- Establish a committee of distinguished researchers to direct activities that communicate the value of OSU research to the state, the nation and the world.

Outcome 5: Advance a global reputation that represents our accomplishments and conveys our unique research culture.

Actions:

- Capitalize on emerging informatics tools to market OSU's research excellence in key U.S. markets.
- Work with OSU's Government Relations Office to identify actionable federal and state research priorities.
- Partner in state on a reserve fund that will enable Oregon's public research universities to be more competitive for federal grants.

- Create a greater presence in DC to advance OSU's federal research agenda.
- Establish advisory boards to bring leading expertise to strategy discussions.

Research Operations and Management ¶ The RO will focus significantly on strategic initiatives detailed above, yet smooth operations of the university research enterprise will require immediate attention to a number of deficiencies in routine research operations. Our top priorities in operations and management are to: ¶

- ✓ Design an implementation plan to accompany the RO work plan
- ✓ Draft a manual of research policies
- ✓ Fully staff the office and reduce turn-over in key positions

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Key metrics ¶ Advancement of the OSU research enterprise will be tracked in FY18 by metrics related to research defined by The Center for Measuring University Performance, publishers of *The Top American Research Universities*: ¶

- Research awards (federal, state, foundation, industry) ¶
- Research expenditures ¶
- Licenses and licensing revenue ¶
- Realized F&A recovery ¶
- # Ph.D. students graduated ¶
- National and international awards and honors to OSU faculty researchers ¶