

## **I.A: How We Could Leverage the Strengths of the Research Office**

### **1. *RO leadership – New leadership has the energy and motivation to reconsider how research business is done and to support office functioning.***

Support faculty researchers.

- Enable them to submit proposals more easily.
- Provide more funding for research infrastructure.
- Simplify compliance processes.

Create a manual that describes Standard Operating Procedures within the Research Office. Identify ways to make every RO procedure better for researchers.

Look outside the university for tools and best practices that improve the operation of the Research Office and advance the research enterprise.

- *Businesses:* Intel, CH2M Hill, Netflix, Google.
- *Peer Institutions:* WSU, North Carolina State, Colorado State.
- *Aspirational Peers:* University of Arizona, Ohio State, Penn State, UIUC, Michigan State.
- *Community Partners:* UO, Knight Cancer Center, Portland Innovation Quadrant, Digital Health.

Implement new research administration software.

Work closely with EH&S to close some safety gaps.

### **2. *RO staff – Committed and professional staff solves complex problems with speed and expertise; they are also flexible, resilient and adaptable. There is good camaraderie between the RO groups. There are career paths within the RO.***

Appoint a task force with one member from each of the three teams within the RO. Charge the task force with finding more efficient and more effective ways to work throughout the life cycle of a research project, from proposal to commercialization.

Encourage the 70 employees of the RO to

- work across their internal silos and serve the RO mission more broadly.
- get out of their cubicles and spend more time interacting with researchers, EH&S staff members, and others.
- take on new responsibilities that make our jobs more interesting.
- act as trusted partners who can work across institutional barriers to overcome barriers to successful research. Help solve problems that affect us, even problems owned by people who work outside the RO office. Incorporate this idea into the RO's mission statement.
- attend research-related meetings in the colleges, particularly meetings called by Associate Deans for Research.
- talk to other research institutions.

- create professional development plans, articulate career goals, identify required skills, and acquire those skills (sales, negotiation, conflict resolution, etc.).

Improve informal communication by establishing a seminar series that brings faculty researchers into the RO.

**3. *Service to community – Service-oriented perspective is evolving throughout the Research Office.***

Clarify and emphasize that the RO, at its core, is a service organization. We exist to support faculty researchers and to help them be successful. Incorporate this emphasis into the RO's mission statement and into each employee's job description.

Expose staff members to researchers who can inspire them and to research that can solve societal problems.

**4. *Climate – Office environment fosters transparency, innovation and collaboration.***

Disseminate these characteristics of the leadership team throughout the rank and file of the office. Incorporate transparency, innovation, and collaboration into the RO's statement of values. Make the value statement visible throughout the RO's physical environment. Talk about the values at meetings.

Foster trust among RO employees.

Empower RO employees to innovate. Help them understand when it's acceptable to try something new and fail.

Stimulate and welcome the flow of ideas from the bottom up. Create a process whereby employees can voice their ideas in a safe environment without fear of reprisal. Reward good ideas.

Communicate with the broader research community as transparently as we communicate with each other. Report real-time metrics. Explain how much F&A is returning to each unit. Improve our messaging about the services we provide. Describe our processes accurately in order to facilitate work flows (e.g., tell researchers what approvals they require, how to secure those approvals, and how the approvals come to fruition). Fix the RO website, which contains broken links.

Create a strategic communications plan and hire a marketing professional to implement it. Consult the marketing specialist in the College of Engineering.

Formalize partnerships with national labs, federal agencies, corporations, and minority-serving institutions.

## **I.B: How We Could Bolster Weaknesses of the Research Office**

- 1. Morale – Morale among RO staff is varied. Union workers and non-union workers have different standing.***

Our goal is to make the RO the happiest office on campus.

Define success. What constitutes an office with high morale? How do you measure it? How good is good enough?

Publish our strategic plan. Employee morale will improve if they perceive leadership as strong and if they understand what we're trying to do.

Define, simplify, and publish Standard Operating Procedures. Define roles and responsibilities clearly while encouraging creativity.

Cultivate and express interest in the staff members. Help them to grow and develop as individuals. Encourage them to create professional development plans and to acquire the skills they need to advance in their chosen profession, inside or outside the RO.

- 2. Communication –Communications are transmitted ineffectively within the RO and to the OSU research community. Many staff in the RO are very focused on individual tasks to be completed and don't communicate with employees in other units.***

Communicate more transparently. Create an internal newsletter and publish it on Fridays. Institutionalize weekly two-way communication about what is happening and what has happened. Rely less strongly on bi-directional e-mail and more strongly on omni-directional social media so that everyone can see everything. What happened in Cindy's 16 meetings this week? What do we all need to know?

Create a better website.

- 3. Leadership - The RO has struggled to manage internal conflict. We have ignored internal conflict and allowed it to fester.***

Address persistent conflicts that diminish trust and weaken morale. Learn to address new conflicts directly when they arise. Find a mediator and/or an expert in conflict resolution. Look in the College of Business.

- 4. Resources – Resources dedicated to the RO are limited and structures are dated. RO systems cause inconsistent/insufficient communications within the RO (reactive vs. proactive).***

Streamline our procedures. Look for ways to reduce paperwork. Ask all 70 RO employees for suggestions about how to simplify our processes. Reward good ideas.

Increase F&A.

- 5. Business processes - Inside the RO, processes from proposal inception to grant close-out appears slow, inefficient and non-transparent to research community. Outside the RO, HR processes are terribly slow, accounting processes have long lags, insurance is costly, and we have a risk averse administrative culture.***

Ask faculty and staff for suggestions.

Identify internal experts on problems that affect us but that others own. Ask the experts to facilitate solutions and to push for solutions.

6. ***Staff and Staffing – Staff turnover and heavy workload prevent office from responding to evolving needs of faculty researchers. There may not be career paths for all RO staff within the RO.***

Engage RO staff members in a continuous discussion of how we can all work smarter.

Help RO staff members to see the big picture. Call their attention to the successes of the OSU research enterprise. Recognize their contributions. Help them understand the connection between their day-to-day work and the societal value created by OSU research.

7. ***Administration of Centers, Institutes and Core Facilities – Administration of CIPS is unstructured and inconsistent within the RO and with Business Centers. Concerns for administration extend to Cascades campus and MSI.***

Create efficient administrative structures with simple and consistent processes. Make existing organizations easier to administer.

Institute external evaluations.

Develop policies, criteria, and processes for sunseting centers.

Plan rigorously and carefully for administration and oversight of large new programs.

Encourage OSU Cascades to develop a research plan.

8. ***Research leadership – Lack of a coordinated research agenda, lack of up-to-date policy manual and near absences of research standards undermine RO affairs. Internally, there is limited planning for leadership succession.***

Facilitate communication among research faculty, industry, national labs, and federal agencies to develop a list of strategic research priorities for OSU. Deliver those priorities to the OSU Foundation. Align the RO's investments with those priorities.

Create a policy manual.

Create half-time 6-month rotator positions that enable faculty members to experience research administration without committing to it and without abandoning their labs.

9. ***Weak Environment, Health, and Safety processes – Lapses in EH&S processes create unnecessary risks for the university.***

Assign the Director of the Office of Research Integrity to look at the 66 units that have compliance issues and to find gaps. Take thorough inventory of all compliance issues that affect the RO. Take responsibility to oversee some issues that affect the research enterprise.

***10. Limited research support outside of the RO - Limited representation in DC - Our one excellent staffer isn't enough FTE. Limited support for proposal preparation.***

Prioritize projects for our representative in DC. Select a few projects to push forward.

***11. Lack of trust and culture of fear. Fear of retribution internally and externally inhibits the ability to accomplish goals. Lack of trust that the staff are doing the right thing. Fear that if we present problems to leadership, then we are the problem.***

Cultivate a work environment in which employees feel they can contribute an idea or a new process without risking rejection, in which management will appreciate their ideas and will implement and reward good ones.

## **I.C: How We Could Capitalize on Opportunities for the Research Office**

1. *Leadership – New leadership centrally and within colleges brings new perspective and vision to OSU research.*

Reach out to the colleges to identify new perspectives and new sources of synergy.

2. *RO process – Electronic research administration system.*

Implement the new research administration software.

Improve internal partnerships within the RO and external partnerships with safety and compliance units.

Build, refine, and document processes and procedures.

3. *New Revenue – Upcoming capital campaign and F&A negotiation could generate new revenue for OSU research.*

Identify ways to influence the capital campaign.

Participate in F&A negotiations. Hard-wire funding for infrastructure and research.

4. *Communications – Communications should engage the Board of Trustees, and federal research agencies.*

Grow the reputation of the OSU campus by improving internal and external communications. Hire a communications manager for the RO.

Take advantage of opportunities to get the Board of Trustees to talk about research. The Board of Trustees will meet in January.

5. *Outreach and commercialization – There are opportunities to grow these if we can place greater value on them in P&T process. Promotion and tenure.*

Meet with promotion and tenure committees and with university administrators from the Provost down to emphasize that it's important to consider outreach and commercialization in tenure decisions.

6. *Supportive leadership – Some staff voiced feeling supported by leadership and that when there is a problem, leadership comes to them first to discuss before responding to faculty. If this is continued and expanded, we will be even more productive.*

When staff problems arise, talk with the appropriate staff members first and try to understand what happened.

## **I.D: How We Could Counter Threats to the Research Office**

1. *Strategy – Current gaps in the funding and innovation portfolios results in lower research productivity across campus.*

Identify faculty members who could attract greater NIH funding and help them to prepare, find appropriate partners, and apply.

Hire new faculty members who can attract NIH funding.

Invite program managers from NIH and other federal agencies to visit OSU, meet faculty, tour labs, and explain their funding priorities.

2. ***Staffing – It is difficult to recruit experienced staff to a small, rural community when cost of living is high.***

Recruit actively from outside OSU for key positions. Identify and recruit key individuals rather than relying solely on open solicitations.

3. ***Funding - Current RO funding model is not sustainable. There is currently no mechanism to increase the budget as demands of research administration grow with research revenue.***

Capture a percent of F&A.

4. ***Reputation – RO has reputation of providing declining and insufficient financial and infrastructure support for research. RO has been perceived as being obstructionist. Past history and perception among faculty impedes assistance to faculty.***

Make funding decisions strategically.

Increase the visibility of our funding activity within the university. Explain on our website whom we funded and how.

5. ***Aggression from faculty – Perception of lack of respect by faculty for RO staff and other negative behaviors.***

Develop a fair and transparent OSU process for responding when faculty or staff members exhibit negative, aggressive, unacceptable, unprofessional behavior toward RO staff. Ensure that OSU leadership at all levels support the process. The essence of the process will be to stop the interaction immediately, remove the problem from the hands of our staff, and let other entities in the university intervene to manage it.

## **II.A: How We Could Leverage the Strengths of the Research Community**

- 1. *Expertise – Broad and deep expertise in both basic and applied research (healthy people, healthy planet, healthy economy), allowing us to have a stake in nearly all regional, state, and national priorities.***

Train new faculty (90 new faculty in 15 months) in how to acquire research funding.

Improve OSU's research reputation to make it commensurate with our research achievements. Improve our ability to communicate our strategic strengths. Hire a marketing communications manager. Ask our representative in DC what would help her. Make presentations to Oregon's federal delegation. Collaborate with other universities, research institutes, and select companies to promote research in Oregon.

- 2. *Collaboration – Collaboration across disciplines distinguishes the OSU research environment.***

Make it as easy as possible for PIs from different disciplines to collaborate on large proposals. Simplify the logistics and the mechanics.

Call meetings for faculty members, postdocs, and students from any discipline who are interested in working on specific societal problems or grand challenges.

As we recruit faculty members, postdocs, and students, incorporate into our marketing message the ease of working across disciplines.

- 3. *Resourcefulness – The OSU community is “battle tested”, creative, and productive in the face of a resource-limited environment.***

Make sure not to create any additional unnecessary barriers to productivity. Behave as a service organization. Avoid friendly fire incidents.

- 4. *Research Ethos – OSU scientists and engineers value research integrity, trustworthiness, and creativity.***

Enhance OSU curricula for Responsible Conduct of Research.

Strengthen the cultural axiom that if we see irresponsible conduct, we challenge it.

Strengthen the cultural axiom that it is often important to understand something differently.

Incorporate research integrity, trustworthiness, and creativity into the OSU marketing message to recruit faculty members, postdocs, and students.

- 5. *Location – OSU researchers have ready access to abundant and diverse natural resources, and we live in a location with high quality of life. OSU has locations all over Oregon in e.g., field stations, agricultural experiment stations, and extension offices.***

Coordinate at the university level our recruiting at meetings of scientific societies that focus on subjects that are easy to study at OSU (AGU, the Ecological Society of America, the Oceanography Society, etc.).



Incorporate into our recruiting messages factors such as Oregon's natural beauty and OSU's cultural value on work-life balance.

Encourage scientific endeavors that take advantage of our presence in every Oregon county (e.g., public health could work on rural poverty and public health disparity).

**6. *Reputation – Many OSU researchers are well respected and connected nationally and internationally.***

Encourage faculty members to promote OSU purposefully when they make trips. When they request domestic or international travel authorizations, ask (require) them to meet with scientific counterparts, funding agencies, OSU alumni, business leaders, or local politicians. They could deliver their own presentations to promote OSU research or a generic presentation prepared by someone else. We could create a Research Impacts brochure for that purpose, and they could distribute the brochure.

Develop a systematic approach to nominate OSU scientists for all available awards and to recognize those who win.

**7. *OSU researchers are accessible – Researchers make themselves available to students, colleagues and the public, with time and space to do foundational research.***

Teach OSU scientists how to communicate successfully with representatives of the media.

Identify key representatives of the media and send them lists of OSU scientists whom they can call when they want perspectives on various issues.

Develop a plan for OSU researchers to reach out to the media proactively rather than waiting for them to come to us.

Improve mentoring (senior faculty mentoring of early-career faculty)

## **II.B: How We Could Bolster Weaknesses of the Research Community**

- 1. *University administration – Strong governance from the colleges creates barriers to transdisciplinary research and threatens sustainability of university-wide CIPs.***

Identify projects that would require interdisciplinary research and present them to the colleges.

Develop a formula for returning overhead based on value to the research enterprise.

Incentivize faculty members to go after fully overheaded proposals.

- 2. *Advocacy from central administration - The value of research beyond OSU reputation is not communicated by university leadership.***

Report to the President of OSU the ways in which high-quality OSU research will attract funding, attract students, improve rankings, and improve human well-being. Convey this information within his frame of reference (he is an economist).

- 3. *Reputation –Awareness of OSU or OSU research is limited.***

Please see II.A.6 above.

- 4. *Infrastructure – Research facilities are insufficient, labs are under-resourced, O&M is inadequate, and IT resources are too weak to support growth of the research enterprise.***

Form an infrastructure working group to prioritize infrastructure needs on campus. Align our building plans with the priorities of that group.

- 5. *Faculty retention – OSU faces an ongoing threat of losing key faculty.***

Offer a higher level of service to the top 20 faculty.

Make succession plans.

Meet with new faculty to set appropriate expectations.

Improve mentoring (senior faculty mentoring of early-career faculty).

- 6. *Perceived or relative lack of support for research by faculty - Often cited are heterogeneous support for proposal development, inadequate infrastructure, expensive graduate student and post-doc costs, etc.***

Manage communications more successfully. Publicize what we really do.

- 7. *Narrow representation of research impact - Research success should be measured more broadly in P&T decisions. Tenure process currently adheres to dated culture, before the benefits of industry contracting were understood.***

Please see I.C.5 above.

8. ***Research-inactive faculty - Not all faculty are engaged in research. Generates sub-optimal culture for research.***

Create new awards for OSU researchers. Recognize outstanding or innovative contributions. Host social events to honor researchers. Invite their departments and chairs to celebrate.

9. ***ROH allocation – ROH is not always shared according to effort. Default should be sharing among units that contribute to project.***

We have a lot of work to do on F&A.

## **II.C: How We Could Capitalize on Opportunities for the Research Community**

- 1. Leadership – Emergence of new leaders represents an opportunity to raise the profile of research within the university.***

Celebrate new discoveries.

Celebrate NSF Career awards and other honors.

Call the research community's attention to our new capabilities.

Please see II.A.1 above.

- 2. Faculty –Cluster hires may advance research reputations and drive industry partnerships.***

Highlight innovation as an asset to the university in our communications.

Urge colleges and departments to give more weight to patents and industrial collaborations in their promotion and tenure discussions.

- 3. New areas of research/funding – OSU is diversifying its research portfolio by growing research support from NIH, DOE, and DoD; in partnership with foundations, industry, and national labs; and through international engagement. We are very underfunded from NIH relative to our peers, and so this could grow.***

Invest in infrastructure and faculty who can attract research support from NIH, DOE, and DOD.

Seek formal partnerships aggressively with national laboratories and with companies.

- 4. Innovation and commercialization – A research park is an essential part of a modern campus and is in development.***

Develop a research park.

- 5. Large philanthropic donations at UO and OHSU may provide new resources for OSU researchers.***

Seek research partnerships with UO and OHSU in order to gain some access to large philanthropic donations and to position OSU for the next large philanthropic donation.

Hire a half-time development officer to promote transdisciplinary efforts in centers and institutes.

## **II.D: How We Could Defend Against Threats to the Research Community**

1. *Funding/cost of research – Sustaining a competitive research program is challenging in an uncertain fiscal environment. Faculty are “dis-incentivized” to go after research projects because of their workload (teaching, student advising, publishing and committee work) and not having support.*

We have a lot of work to do on F&A.

2. *Infrastructure – Research infrastructure depreciates further as replacement, renovation and operational costs rise.*

Create partnerships with private industry to provide services that do not represent OSU’s core mission (i.e., parking garages, student housing and dining, etc.).

3. *Compliance – The federal regulatory environment and costs of compliance are significant threats to continued operations. Non-compliance outside of the regulatory environment (e.g., not submitting timely progress/financial reports or receiving an unfavorable audit report) threatens OSUs research funding portfolio.*

Following Vanderbilt’s lead, publish the total cost of research compliance. It is very expensive to be perfectly compliant in all areas.

Accept that we cannot eliminate all risk. Prioritize the sources of risk and pay special attention to areas that need it. Educate university leadership about the most important sources of risk. Look at different ways of doing business.

Participate in national associations that are trying to influence the level of regulations that come our way.

4. *Natural disasters – Climate change and seismic upgrades impose significant added costs to research operations.*

Bring awareness to this problem.

Account for operations and maintenance in budgets for every new structure.

Explore ways to conserve energy.

5. *Changing nature of funded research – Federal agencies, most notably NSF, are shifting funding priorities to “outcome-based” research, reducing the amount of funding available for foundational research.*

Remind the research community that it’s possible to conduct research that’s motivated by both a desire to understand nature and a desire to solve societal problems (i.e., research in Pasteur’s Quadrant).

Increase communication between OSU’s research community and OSU’s broader impacts team.

Help research faculty to articulate the societal value of their research.

6. *Leadership succession – National leadership changes could have significant impacts on research.*

!

7. *Staffing – It is difficult to recruit experienced staff to a small, rural community.*

Please see I.D.2 above.

8. *F&A rate and recovery - More than \$15M unrecovered F&A severely inhibits OSU's ability to support research. Furthermore, many of the grants and contracts with unrecovered F&A are non-standard, increasing the administrative cost. OSU's F&A rate is approximately 5% below our peers. This inhibits our ability to support research at every level.*

We have a lot of work to do on F&A.