

Working with University Research Offices

Part 1: University Research Offices:

1.1 Mission of University Research Office:

University research offices are developed to support university leadership, administration, staff, faculty, and sponsors to facilitate faculty and student research, scholarship, and innovation. They are service-centered organizations focused on providing the university community with the necessary infrastructure and services that allow for research, dissemination, and commercialization of new knowledge and innovation. This mission is often focused on:

- Developing and facilitating partnerships and collaborations between university researchers, government, and industry to create an atmosphere of success.
- The development of a strategic infrastructure for ethical conduct of interdisciplinary and transformative research within the university, local, state, national and global communities.
- Fostering an inclusive and diverse environment for research and education.
- Cultivating a culture of innovation.
- Providing the support and infrastructure to incentivize the development of new technology that creates an economic impact.
- Support synergy between the academic and research missions of the university.

1.2 Goals of University Research Office:

The goal of a university research office is to create a climate of support for all university researchers to allow the advancement of their research activities. This is accomplished through adding value to the researcher and their research experience. This requires:

- Achieving the trust of the university administration, faculty, staff, and students.
- Building long-lasting relationships with internal and external stakeholders and sponsors to drive research and innovation.
- Understanding the goals of the researcher, the university, and the sponsor.
- Fostering a diverse and inclusive environment focused on continuous improvement.
- Commercializing research output for broader impact.

1.3 Structure/Organization of a University Research Office:

The names and locations within each University structure varies significantly, however, university research offices generally provide the following services:

- **Identifying Funding Opportunities**
 - Internal Funding – Universities often provide their own funding in the form of internal grants provided to researchers at their university. They will have a wide range of support as well as individual submission requirements.
 - External Funding – Research offices may maintain databases of external funding opportunities, which would include federal grant agencies, private foundations, and other non-government funding agencies. Research offices may also subscribe to available external databases of additional funding opportunities.
 - Many sponsored funding opportunities limit the number of submissions allowed from a single institution. When this happens, the research office will often hold internal competitions to select which submission(s) will be submitted for that institution.
- **Proposal Development Assistance** - University research offices provide assistance to faculty members in the grant proposal writing process. This often includes hosting workshops and seminars focused on grant writing skills and strategies, as well as providing editorial assistance to review and strengthen proposals. This assistance may include a focus on aligning the proposal toward the specific grant requirements and the goals of the funding organization, as well as developing broader impacts through collaborations with the university's external partners.
- **Research Compliance** – It is critical that university research activities adhere to the regulatory requirements of the university, federal, state, and local governments, and the specific funding agency. This includes, but is not limited to, human subject research, animal use and care, biosafety, export control requirements, and conflict of interest management. It is the role of Research Compliance to ensure the development and implementation of appropriate university policies and procedures and to provide program and educational opportunities to faculty, staff, and student researchers to ensure their compliance to these regulations.
- **Technology Commercialization and Industrial Collaboration** – The research office manages the intellectual property assets of the university. This often focuses on supporting collaborations between university researchers, government agencies, and industry partners to facilitate the transition of applicable faculty research into patentable and/or marketable products. Technology commercialization may also include the development of confidentiality agreements, copyrights, material transfer agreements, and licensing agreements.

- **Grants Administrators** – Grant administrators may exist within a university research office or may reside within an individual college or program. Their goal is to perform administrative support and guidance for research funding. This may include pre-award grant submission support and post-award management of the budget and required grant activities.

Part 2: Office of Commercialization and Industrial Collaboration.

2.1 Objectives:

The Office of Commercialization and Industrial Collaboration may be housed within the Office of University Research or maybe an independent office within the University. The main objectives of a university Office of Commercialization and Industry Collaboration (regardless of the specific name given to this office) is to:

- Increase the opportunities for faculty and students to conduct transformative research and discovery.
- Advance the entrepreneurial activities associated with research, including the development and marketing of new technologies.
- Increasing the impact of this universities' research on a local, national, and international scope.

This includes the TTP (Technology Transfer to Practice) process.

2.2 Areas Covered by the Office of Commercialization and Industry Collaboration:

The Office of Commercialization and Industry Collaboration assists researchers with all areas of protection in terms of their intellectual property, an intangible asset, and commercialization resulting from their teaching and research.

2.2.1. Collaborating with Industry Partners – The university Office of Commercialization and Industry Collaboration works to promote, facilitate, and implement innovations in faculty and student research among faculty, students, and industry partners. This can be done through a variety of options including educational and mentoring opportunities, including Entrepreneurial Centers, small business development centers, ICorps (the NSF Innovation Corps) programs, and other mentoring programs. The Office of Commercialization and Industry Collaboration can help to facilitate communication between researchers and available and interested industry collaborators. Types of collaboration between universities and faculty researchers can include academic collaborations, material transfer

agreements, visiting scholar programs, industry sponsored research, and partnerships for grant opportunities.

2.2.2. Protection of Intellectual Property: Intellectual property can be protected through a variety of methods including patents, copyrights, and trademarks. The Office of Commercialization and Industry Collaboration can assist researchers in the invention disclosure process and with filing for a patent, copyright, trademark or trade secret protection.

- **Patents** – Patents is a right to exclude others from making, using, selling, offering for sale an invention or discovery. This includes providing the owner of the patent with the right to license the invention to others, use it themselves, or sell it to someone else. A patent is generally good for 20 years from the time it is initially filed.
- **Copyrights** – Copyrights protect an author’s “original works of authorship”. This includes most types of intellectual works such as literary work, dramatic work, musical works, and artistic works. Items are not required to be published to be provided copyright protection.
- **Trademarks** – Trademarks protect signs, logos, expressions, phrases, and other designs that are used to represent a service or a product, including brands, labels, names, signatures, etc.
- **Trade Secrets** – Trade secrets are patterns, formulas, programs, techniques, etc. that can provide an economic advantage over a competitor who does not know the secret.
- **Non-Disclosure Agreements (NDA/CDA)**

2.2.3. Commercialization:

2.2.4. Office Personnel: The office staff within a university’s Office of Commercialization and Industry Collaboration generally falls into the following categories:

- **Patent Support Staff** – They provide help with the invention disclosure and patent filing process.
- **Licensing Staff** – Licensing staff identify the matches between available technologies developed at the university and current industry needs to develop licensing agreements.
- **Business Development Staff** – They promote the commercialization of university developed inventions or discoveries through start-ups that can provide benefits to the community, the university, and the state. The amount of support offered to faculty entrepreneurs will vary greatly by institution but can include assistance with business planning, market analysis, location of available venture financing, and many other business building requirements.
- **Legal Staff** – Responsibilities of the legal staff often include managing the information related to patents and disclosures, manage government reporting,

and other additional associated paperwork. They may also work with outside counsel and interact with licensees on routine issues such as implementation of restriction requirements and the payment of annuities.

- Accounting Staff – An accounting staff is vital to handle the receiving and processing bills from outside counsel, receiving royalties, appropriately distributing royalty payments, and reporting metrics of success for the university research office.
- Other (Marketing, Outreach, Students, etc.)

Working closely with the Office of Commercialization and Industry Collaboration can help researchers avoid some of the very common mistakes:

- Failure to properly manage an invention or discovery.
- Issues associated with improper disclosure of an invention or discovery.
- Obtaining commitments of support from people within an organization that does not have the authority to provide the support.
- Wasting significant time and effort by not getting the support and guidance available through an Office of Commercialization and Industry Collaboration.

References

Association of University Technology Managers - <https://autm.net/surveys-and-tools/tech-transfer-practices-manual>

Baylor University: <https://www.baylor.edu/research/resources/>

University of California Davis: <https://research.ucdavis.edu/about-us/mission-vision/>

University of South Alabama:

https://www.southalabama.edu/departments/research/resources/ored%20strategic%20planning_goals.pdf

<https://www.southalabama.edu/departments/research/ocic/faq.html>

<https://www.southalabama.edu/departments/research/ocic/material-transfer-agreements.html>

University of Washington: <https://www.washington.edu/research/or/about-or/>