Research

Guide



TEXAS TECH UNIVERSITY Office of Research & Innovation

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Introduction

To aid new and current faculty, OR&I has created a Research Guide as a reference for basic information and services offered. Other specific guides to funding, proposal development, and proposal review and submission can be found on our website.

Attending new faculty research orientation as well as talking with colleagues and the department chair is also important to better understand the research expectations in the department. OR&I also offers resources and activities that support faculty development.

The Research Guide is not official policy but serves as a reference to help faculty understand how OR&I operates and identifies available assistance for proposal preparation and research-related compliance.

Please note that Texas Tech may have different human subject and animal use policies and procedures than other institutions and universities.

The information in this guide is current as of publication but is subject to change. Please <u>contact the OR&I</u> with any questions or concerns.

Offices & Services within the Office of Research & Innovation

The <u>Office of Research & Innovation (OR&I)</u> provides oversight and management of all research functions at Texas Tech. The office serves as a resource to all faculty members and offers guidance every step of the research process, from finding funding to taking technology to market.

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Office of Research Services

The <u>Office of Research Services (ORS)</u> supports the university's research mission by providing centralized services for submission of proposals, negotiation, and acceptance of grants, contracts, and cooperative agreements for sponsored projects.

ORS responsibilities include:

- Institutional review and submission of proposals
- Responding to faculty requests for specific information
- Assisting with budget preparation and completion of assurances and other forms
- Ensuring that agency and university requirements are met
- Negotiating the business aspects of grants and contracts on behalf of the university
- Reviewing all award documents prior to acceptance by the university
- Providing institutional signature and processing all awards for acceptance
- Assisting and advising principal investigators, project directors, and project staff
- Non-financial post-award assistance
- Maintaining files of active proposals and awards
- Responding to requests for information or special reports
- Maintaining up-to-date reporting system

Office of Research Development & Communications

The <u>Office of Research Development & Communications (ORDC)</u> works with university researchers to form new interdisciplinary research working groups and foster collaborations on campus, across the country, and internationally. Other responsibilities include:

• Managing limited submissions

- Identifying tailored grant competitions
- Encouraging engagement in collaborative opportunities
- Connecting researchers with tools and resources in the OR&I
- Offering early-stage proposal development assistance
- Planning strategic resubmission
- Offering topical grants workshops
- Staffing grant editors
- Assisting with graphic design
- Emailing funding opportunities and upcoming events
- Highlighting research at Texas Tech

Export Control

Faculty, staff, and students at Texas Tech will likely, at one time or another, intersect with federal regulations that impose access, dissemination, or participation restrictions on the transfer of items and information regulated for reasons of national security, foreign policy, anti-terrorism, or non-proliferation.

The Office of Export Control establishes policies for federal laws and regulations governing the export of information, products, and technology. More information on training, situations that fall under export control, and other resources are available on OR&I's website.

Innovation Ecosystem

Office of Research Commercialization

ORC helps move research discoveries from the university laboratory to the marketplace.

Steps for commercialization include:

- **Disclosure** When useful technology is invented, work should be disclosed through the ORC by means of the disclosure portal. Disclosure should occur before the work is published or any other public disclosure of the work has been made. Failure to do so can limit patent rights for the technology. When an invention disclosure is filed with the ORC, inform the office of any public disclosures already made or any that are planned.
- Assessment Once an invention is disclosed, the ORC will schedule a meeting with the inventor to review the disclosure and will create a written technology assessment that reviews the patentability and commercial potential of the

invention. The assessment will be shared and discussed with you, and if the assessment is positive, the ORC will initiate intellectual property protection for the technology and develop an appropriate commercialization strategy. The ORC will forward copies of all patent applications drafted to the researcher for review to ensure that all applications are complete and accurate.

- **Marketing** Depending on the type of technology and its stage of development, ORC may market the technology to existing companies and list the technologies on various websites to identify potential license partners. The office may also work with the inventor and local entrepreneurs to create a start-up company. Either scenario results in a license agreement between the ORC and a business entity.
- **Terms** The license agreement will include terms and conditions for the use of the technology, commercial development milestones, and define the compensation that will be paid to the university. The compensation will be divided into license fees, legal reimbursement, royalty payments on net sales, and possibly equity in the business partner's company. Inventors can assist the ORC in the licensing process by letting the ORC know about new technology enhancements, upcoming publications or public presentations made to industry, and any questions about or interest in the new technology that may be received from industry contacts.
- Licensing After a license agreement is in place, ORC monitors the licensee to ensure full compliance with contract terms and to support their success in the marketplace. The office also receives all license payments and distributes net revenue generated from the license agreement in accord with <u>Texas Tech</u> <u>Operating Policy 74.04</u>. Inventors receive forty percent of all net revenue generated from license compensation.

Innovation Hub

The Innovation Hub at Research Park is Texas Tech's center for entrepreneurialism and innovation. The Hub is home to a number of programs and facilities including:

• **Texas Tech Accelerator** – Designed to assist faculty, students, and entrepreneurs launch startup companies or discover licensing opportunities based on university technology. Participation in the accelerator is based on an application process and requires the company founders to attend a twelve-week boot camp. Participating companies have access to institutional funding, grants, co-working space, and mentors.

- **Red Raider Startup** A weekend where you and your potential business partners progress through a set of learning modules in a positive environment that includes ideation, team formation, customer discovery, rapid prototyping and pitch workshops. This program is the best way to get started for first-time entrepreneurs. This program is offered four times per year to students.
- Hub Camp Once you have an idea and you are ready to understand how your idea can make money, Hub Camp is the next step. This three-day basic boot camp is meant to provide an outline of the work needed to be done to create a fundable business plan. The camp is a steppingstone to the iLaunch competition and the possibility of winning funding. This program is offered throughout the year.
- **iLaunch** Students and entrepreneurs must submit an application to the program. The competition provides a cash award to the winner. The competition is hosted at The Hub once a year. Participants receive mentoring, templates for a business plan, and pitch deck. It's recommended that interested parties attend Hub Camp to increase chances of winning the iLaunch competition.

University Recognized Research Centers and Institutes

University recognized research centers or institutes are approved organizational units approved by the Vice President of Research & Innovation and the Board of Regents to facilitate activities for faculty, staff, and students.

These centers and institutions provide engagement and outreach beyond what is possible from traditional academic units. Each university recognized research center or institute should conform to university policies as well as to state regulations and statutes.

General guidelines for determining whether a unit should be titled a center or an institute are as follows:

- Center composed of faculty, potential staff, and students who declare a shared technical interest and pursue shared research, instruction, engagement, and/or outreach that involve common activities.
- Institute organization having a particular object or common factor, especially a scientific, educational, or social one and may be a collection of centers.

Formal proposals for establishing a university recognized research centers or institutes should be initiated through OR&I according to guidelines. The proposed research center or institute must be clearly aligned with the university strategic plan.

Centers and institutes operating solely within an academic department or college may be established by the respective dean. A comprehensive list of <u>centers and institutes</u> is

available. Those spanning colleges are organized by the OR&I with Board of Regents approval and report to the OR&I.

Responsible Research

OR&I is responsible for overseeing responsible conduct of research (RCR), compliance issues, human subjects, animal use, and EHS.

Training

Texas Tech encourages all faculty, students, and staff to participate in discussions and training about RCR. A variety of training opportunities are available to all members of the Texas Tech community. There also are select activities and courses that count toward RCR training requirements. For information or questions, please contact the Office of Responsible Research.

iThenticate Service

To support responsible research practices at Texas Tech, OR&I encourages use of iThenticate software to screen grant proposals and scholarly papers for plagiarism or misuse of text.

Investigator Financial Disclosure

Federal regulations require that Texas Tech have policies and procedures in place to ensure that employees disclose any significant financial interests that may represent an actual or potential conflict of interest in relationship to externally sponsored projects.

All investigators need to annually disclose significant financial interests with Texas Tech. The Investigator Financial Disclosure website provides instructions. For those who have NIH or other PHS grants, Texas Tech follows NIH guidelines for financial disclosure. Annual disclosure is submitted via the secure online questionnaire.

Faculty or other personnel who have applied or plan to apply for NIH or other PHS funding must complete training and disclose business or financial interests before submitting proposals or receiving funds. Texas Tech's Financial Disclosure office offers assistance, information and training options.

Texas Tech Operating Policy 74.17 outlines the general university regulations and procedures regarding annual disclosure of significant business and financial interests as well as the identification of conflicts or potential conflicts of interest, which serve to protect the credibility and the integrity of the university's faculty and staff, as well as the

institution, so that public trust and confidence in its sponsored activities are not compromised.

Human Research Protection Program

HRPP is the office that coordinates with the Texas Tech University IRB. All research involving human subjects at Texas Tech must be reviewed by the IRB. The IRB recommends that researchers conducting human subject studies complete some form of training. The Texas Tech HRPP office may conduct post-approval review of human subjects work.

Not all studies require approval by the full IRB. The HRPP has created an interactive module to help determine if IRB review is needed. Step-by-step instructions and forms are available for requesting an exempt, expedited, or full board review.

- **IRB Deadlines** The IRB convenes the full board the last Tuesday of each month at 3 p.m. Full board proposals submitted three weeks prior to the scheduled meeting are assigned to an IRB primary reviewer. The researcher and the primary reviewer will work together to prepare the proposal for the meeting agenda.
- **Expedited or Exempt Reviews** Human subjects research proposals submitted for expedited or exempt review are reviewed in a timely manner. Allow 3-5 business days prior to the review for data entry and file preparations. It is the mission of the Texas Tech IRB to operate efficiently throughout the review process to support the research efforts of the university.
- **Resources** A list of regulations, reports, documents and website links important to human subjects research as well as necessary forms and research examples can be found on the HRPP website.

Animal Care Services

The ACS is charged with providing for the physical and psychological well-being of animals used in research and teaching. The office also aids investigators in obtaining and properly using animals. <u>Regulations and guidelines</u> as well as <u>protocol forms, annual</u> <u>review forms and protocol amendment forms</u> can be found on the website.

• **IACUC** – The Institutional Animal Care and Use Committee (IACUC) serves as the review body for animals used by Texas Tech faculty, staff, and students. Texas Tech policy requires that the use of all live vertebrate animals for research, instruction, demonstration, production, or maintenance purposes by faculty, whether the animals are located in facilities at Texas Tech or elsewhere, be approved by the IACUC in advance of their usage.

- Animal Use Training Occupational Health and Safety the IACUC requires all individuals that will work with animals through Texas Tech to complete the generic training course. Additionally, all personnel working with animals must enroll in our annual Occupational Health and Safety (OH&S) program. Before any animal work can begin the training and the OH&S assessment must be confirmed in the IACUC office. At any time, an animal user can be reassessed by the OH&S program. Your completed quiz score for the generic training must be submitted to the IACUC. The OH&S assessment must be completed annually. Other trainings that are available are species specific, emergency preparedness, and CITI (Collaborative Institutional Training Initiative). Please contact the IACUC to learn more about these training opportunities.
- Meetings and Protocol Submissions Meetings of the IACUC are held each month. Scheduled meetings are posted on the IACUC webpage. Regularly scheduled meetings that fall on a university holiday are ordinarily rescheduled. The IACUC Chair may convene additional meetings as needed. Protocols are either reviewed by a designated member review process or by a full-committee review process. The latter occurs at a convened meeting of the IACUC. Any IACUC member may call a protocol for full committee review at any time when it is under review. Protocols requiring full-committee review must be received at least seven business days prior to a scheduled meeting date (i.e., the Wednesday prior to the week of the scheduled meeting) in order to be placed on the agenda. Protocols received after the aforementioned deadline may be deferred to the following meeting.

Laboratory Safety

Laboratory safety is a major focus at Texas Tech. As a result of a serious accident in 2010, the U.S. Chemical Safety Board (CSB) conducted an investigation. Texas Tech has fulfilled all CSB recommendations and the CSB investigation was closed in June 2015. A website dedicated to the investigations and the university's response has been created. The university also maintains a <u>Lessons Learned</u> web page of incidents at Texas Tech and other institutions.

Laboratory Safety Manual

The university's Laboratory Safety Manual clearly defines roles, responsibilities and procedures around laboratory, studio and research safety. All faculty, staff, and students who work with chemicals or other hazards in our laboratories, studios, shops, and other facilities must design a safety plan that addresses the unique hazards in their research space. Additionally, awareness training will be required by your department or supervisor. Please contact <u>EHS</u> with any questions.

Environmental Health and Safety

EHS is responsible for a variety of safety, health, and environmental issues at Texas Tech. Staff members have been assigned to specific areas to assist faculty, staff and students. The office also is responsible for hazardous and radioactive waste removal.

EHS has created a variety of online training and laboratory safety materials including a laboratory safety checklist to help researchers and lab managers.

EHS Programs

- Environmental Protection
 - Management of hazardous chemical and biological wastes
 - Surveillance of campus food facilities, swimming pools, laboratory animal facilities, and underground/aboveground storage tanks
 - Follow-up of environmental complaints
 - Coordination of pest control operations
 - Monitoring of storm water management activities
- Safety Concerns and Near-miss system (SCANs)
 - Reporting of potential safety issues including hazards or incidents that have not yet resulted in personal injury or property damage
 - Reporting potentially unsafe conditions, unsafe work habits, improper use of equipment, use of malfunctioning equipment, or unexpected reactions
 - Reporting can be anonymous
- Occupational Safety
 - Monitoring compliance with federal, state and local safety and health regulations
 - Surveys that may include but are not limited to:
 - Noise
 - Lighting
 - Ventilation
 - Chemical hygiene
 - Hazard communication
 - Airborne contaminants
 - Accident investigation
 - Training provided in areas such as respiratory protection, hazard communication, and forklift safety

- Laboratory & Biological Safety promotes and supports a strong safety culture in Texas Tech laboratories, art studios, and field research sites
 - Radiation Safety Program
 - Serves a radiation-use program that is overseen by a Radioactive Materials Broad License issued to the university by the Texas Bureau of Radiation
 - Consists of researchers using radioisotopes to label amino acids on proteins, nucleic acids, sugars and other molecules
 - X-ray diffraction machines
 - Small sealed source

Safety Committees

- Institutional Laboratory Safety Committee faculty-led committee charged with improving Texas Tech safety culture in laboratories, art studios, and field research sites.
- Institutional Biosafety Committee faculty-led committee charged with reviewing and approving research conducted with microorganisms pathogenic to humans, plants, or animals.
- Radiation/Laser Safety Committee
 - Establishes policies and procedures in accordance with current regulations established by the Texas Bureau of Radiation Control (BRC)
 - Provides administrative advice regarding radiation and laser safety
 - Approves all applications, amendments, and sublicense renewals relating to the use of radiation safety

Required Certifications

If your proposal involves human subjects and/or animal use, review and approval by specific university boards is required. Please contact the appropriate office before submitting a grant proposal.

- Human subjects HRPP or the IRB reviews all projects involving human subjects, regardless of funding. Please note that some proposals need IRB approval before submissions. If research includes genetic testing or use of the functional magnetic resonance imaging (fMRI) equipment at Texas Tech for body or brain scanning of human subjects, contact the HRPP office.
- Animal subjects The Animal Care and Use Committee reviews and approves any project using animals.

• **Radiation, lasers, biohazards, or recombinant DNA** – EHS assists with these areas and requires authorization from the appropriate campus committee.

The appropriate committee will notify the researcher and ORS of its approval once it has been obtained. As required, ORS will forward this notification to the potential sponsor.

All investigators must annually disclose significant financial interests to Texas Tech. The <u>Investigator Financial Disclosure website</u> provides forms and instructions. For those who have or plan to apply for NIH or other PHS grants, Texas Tech follows NIH guidelines for financial disclosure.

Funding

The OR&I has a variety of federal, state, private, and internal sources of financial support for research, scholarship, and creative activity, and every sponsored project on campus, regardless of whether it is deemed research, instruction, or public service, must involve ORS.

A sponsored project is established when financial support is awarded to the university by external sources in support of research, instruction, training, services, or other scholarly activity under an agreement.

Some sponsored project proposals involve several areas of OR&I and may require specific forms or training through the RCR, the IRB, the Animal Care and Use Committee, or the Investigator Financial Disclosure Committee.

Limited Submissions

ORDC manages all limited submissions, those proposals that limit the number of applications they will accept from an institution. The request for proposal (RFP) will state if it limits the number of submissions.

When a limit is imposed, the university will require a notice of intent from those interested in submitting a proposal in response to that particular RFP. If more notices are received than the institutional limit allows, an internal competition will be held. As with all proposals for sponsored projects, proposals for limited submission programs are not authorized to leave the university without review and institutional approval from ORS.

Industry/Corporate Sponsored Research and Engagement

Industry and commercial organizations are a valuable source of research support. While the university encourages faculty interaction with their counterparts in industry, faculty members must recognize the potential for conflicts of interest. Any faculty member receiving funding from industry or corporations must file disclosure documents with the FCOI administration of the OR&I.

If funding is coming from an industry source, ORS provides <u>important forms</u> for both the researcher and the industry sponsor. Those forms include:

• Texas Tech policies for industry sponsors

- Standard agreement for industry sponsors
- Nondisclosure agreement (two-way)
- Nondisclosure agreement (one-way)
- Material Transfer Agreement (MTA)

For questions on these policies and procedures, please contact ORS.

It is common for industry partners to request an opportunity to license intellectual property that is developed through sponsored research agreements. Office of Research Commercialization is responsible for negotiating such license agreements for technology developed by university researchers and is available to assist with all intellectual property, patent, and licensing questions.

External Funding

<u>Funding Institutional</u> provides federal and private opportunities and is recommended as a primary source of finding funding. Texas Tech has a membership to Funding Institutional. For questions regarding this system, contact the ORDC.

Internal Funding

Internal funding resources available to faculty can be found on the OR&I's Faculty Awards page.

- Faculty Travel Grants assists faculty with costs associated with domestic (up to \$1,000) or international (up to \$1,500) travel to present at prestigious conferences, visit funding agencies, or conduct on-site research. Applications are accepted each semester for travel the following term.
- Proposal Assistance Program Provides research funding, typically around \$4,000, to initiate new lines of research (research seed funding) or resubmission of previously declined proposals (proposal resubmission). Applications accepted once per semester.
- Open Access Publication Initiative helps defray the cost of open access publication fees and expedite the dissemination of research findings. Awards are first-come, first-serve and limited to \$1,000 per publication, per faculty member, per academic year.
- Scholarship Catalyst Program Sponsored by the Office of the President, Provost, and Research and Innovation to promote research, scholarship, and creative endeavors of faculty in the Arts, Humanities, or Social Sciences.

Application forms and information for the above programs can be found in <u>competition</u> <u>space</u>.

Three internal faculty awards are designed to financially reward the research, scholarship, creative endeavors, and teaching of Texas Tech faculty:

- Barnie E. Rushing Jr. Faculty Distinguished Research Award
- Chancellor's Council Distinguished Research and Teaching Awards
- President's Commercialization Award

Proposal Development

Sponsored Project Definition

A sponsored project is a project in which funds are awarded to the university by an external party in support of research or other scholarly pursuits. A sponsored project typically, but not always:

- Is awarded through the RFP or other similar competitive process
- Has designated principal investigators (PIs)
- Commits the university to specific conditions and requires that the PI follow a specific plan of research or meet stated goals
- Has specific financial accountability that will include:
 - Regular budget reporting
 - The university's Facilities and Administrative (F&A) cost or indirect cost rate
 - Equipment purchase agreements
 - Any salary, fringe benefits, or insurance to be paid
- Has a specified end date for funding
- May require project outcome reporting to the sponsor or other terms and conditions for the disposition of tangible property such as equipment, records, or other deliverables
- May include terms and conditions for the disposition of non-tangible property such as intellectual property or rights in data
- May require a university data management plan

The university may also receive gifts that can be used for research, scholarship, and creative activity. Gifts are made by a person or organization external to the university.

Sponsored Project Stages

A sponsored project has several stages:

- **Pre-proposal Development** A PI determines a need in a specific field. Often a PI will need to look outside their area of expertise for co-PIs or collaborators with complementary skills and expertise.
- **Funding Opportunities** Once a PI determines a need, they must look for external funding opportunities. The OR&I provides <u>Funding Institutional</u> to assist faculty in finding funding opportunities.

- **Proposal Development** The PI is responsible for assembling the proposal package, preparing a budget, obtaining pre-award review, completing the internal routing process, and acquiring the appropriate approvals and departmental signatures. Faculty should check with their respective department chairs for policies and approvals specific to their department or college. ORDC can review and provide feedback to proposal narratives.
- **Proposal Submission** ORS will review and submit the proposal. Faculty should allow adequate time for ORS to check the proposal to ensure that university and sponsor requirements are complete, and budgets are correct. All completed proposals should be submitted five business days before the agency deadline.
- Award Negotiation and Acceptance Once a sponsor approves a proposal, the university will negotiate acceptance of the award. Once final documents are signed and budget amounts set, oversight moves from ORS to Accounting Services (AS).
- **Post-Award** AS is responsible for account setup, sponsor billing, sponsor financial reporting, and other functions.
- **Reporting** Many sponsors require periodic reports annually and a final report at the end of the grant. All technical reporting is the responsibility of the PI.
- End of the Project Contact AS to close out grant accounts

Routing of a Proposal

ORS uses the <u>Cayuse 424</u> electronic proposal submission system.

A series of training modules are available to help researchers understand how to use Cayuse. For questions, please contact your <u>ORS proposal services</u> staff person.

All proposals should be routed through ORS to ensure that the proposal has been authorized by the appropriate university representatives. Proposals will utilize the online routing capabilities of the Cayuse SP system. In most cases, ORS acts as the authorized office to sign applications on behalf of the university.

ORS has created a <u>proposal checklist</u> to help expedite review of proposals within Texas Tech, avoid delays in rewriting and revising proposals, and facilitate planning for the initiation of the proposed project.

Budget Development

The preparation of a budget is an important part of the proposal preparation process and should be considered as the project is developed. This is important for two reasons:

- Developing the budget alongside the narrative assures that the budget items are specifically related to activities described in the proposal.
- Reviewers often examine the budget in the context of the program narrative, evaluate whether sufficient and appropriate personnel to perform the work have been included, and match the overall budget to the work proposed.

To aid investigators, ORS has a <u>budget development webpage</u> that includes a budget template.

Research expenses can be divided into two areas:

- **Direct costs** specific line items in a budget such as salaries, fringe benefits, equipment, and travel.
- **F&A costs** costs incurred for common or joint objectives, such as building or equipment depreciation and general administrative costs. F&A is paid as a percentage of direct costs, with the amount negotiated by the university and the sponsor. The distribution of F&A costs is developed between the colleges and OR&I. Distribution varies by college. Check with your department chair for specifics.

Cost Sharing

Please note that investigators must obtain approval from their department and college before committing the university to any cost sharing. This must be secured before a proposal is submitted. Cost sharing has a significant financial impact on the university. The final decision on cost sharing is made by the vice president for research and innovation. All requests for cost-sharing should be routed through department chairs, college deans, and the vice president for research and innovation.

The university's position is to provide cost sharing only when required by agency guidelines, delineated in specific program announcements, or are necessary due to the competitive nature of the proposal. In some cases, voluntary committed cost sharing is prohibited by the sponsoring agency, such as the National Science Foundation (NSF), which will only accept cost sharing in a select number of programs.

Data Management Plans

The NSF and other agencies require that projects have a data management plan that includes permanent storage and accessibility provisions. The Texas Tech University Libraries has created a <u>data management section</u> on their website to help fulfill this requirement.

If your project requires exceptionally large amounts of space for data storage and transfer or involves complex and/or security related issues, please contact the Office of the Chief Information Officer.

Proposal Submission

ORS provides centralized administrative and management services for sponsored projects. All sponsored projects applications are submitted by ORS through the Cayuse 424 electronic proposal submission system and the Cayuse SP system for electronic routing. For questions, please see your ORS representative.

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Pre-Proposals

If a pre-proposal is required, it should be received by ORS at least five business days prior to the sponsor deadline. Electronic routing of pre-proposals is optional only if the pre-proposal contains no budget. Pre-proposal routing will consist of a completed internal processing form, which is found in Cayuse SP. The internal processing form should not be submitted for approval unless a budget is submitted, or cost sharing is proposed.

Electronic Proposal Submission

Proposals submitted electronically using the Cayuse 424 system should use the electronic routing option available in Cayuse SP. Proposals submitted through other electronic systems must be routed electronically. In order to route electronically, PIs will need to enter proposal information into Cayuse SP even though the proposal will be submitted using a different mechanism.

Please check with <u>your proposal analyst</u> before routing your proposal as they can answer any questions you may have and assist you in the process.

ORS Deadlines

Proposals must be submitted to the office five working days before the proposal deadline to ensure adequate time for a thorough review of proposals for compliance to university and sponsor regulations and to double check the budget for accuracy. ORS will submit all proposals.

Late Submissions

A proposal submitted to ORS less than five business days before the sponsor deadline will be considered a late submission. ORS will make every effort to process late submissions, but there may not be time for an adequate review. If there is insufficient time for a complete review of a late proposal, ORS is not responsible for the compliance

of the proposal documents. In these cases, the PI will assume responsibility for the proposal being returned without review by the sponsor or in any delays in the award setup stemming from the late proposal.

If an award is made based on a late submission of a proposal signed by the college, school, department, or campus leadership, that unit will be responsible to cover costs incurred by Texas Tech as a result of proposal errors. Such costs might include cost sharing commitments, or unallowable commitments of Texas Tech resources.

Coordination with Campus Committees

On the Internal Processing Form and in the Cayuse routing system, you must indicate if your proposal involves: human subjects, animal use, radiation or biohazards or recombinant DNA or explosives. If so, you will need to submit your proposal to the appropriate campus committee for authorization. If you indicate that approval is pending as of proposal submission, you will receive a reminder letter from ORS to obtain such approval.

ORS also generates a listing which alerts the appropriate committee that your proposal requires review. The campus committee will notify you and ORS of its approval, once it has been obtained. As required, ORS will forward the notification to the potential sponsor. Information regarding approvals also is entered into a proposal database.

Award File Maintenance

Once a proposal has been submitted to the sponsor, ORS retains a complete electronic copy. Acknowledgment of receipt from a sponsor or any further correspondence will be housed electrically. In addition, a computer record will be generated with this information. The record will become part of the proposal database, which is used to generate monthly reports of all proposals and grant activity on campus. Once an award is pending, the complete file will be stored in ORS for the appropriate retention period.

Negotiation

While technical negotiations are always conducted with the PI, business, financial and administrative negotiations are conducted with ORS, the office authorized to negotiate on behalf of the university. The PI will be involved and informed of any negotiations, and no decisions will be made without full disclosure to and concurrence with the PI.

Award Acceptance

Individual faculty members, department chairs, and/or deans are not authorized to sign sponsored project agreements on behalf of Texas Tech. Award documents take many forms depending upon the type of agency and project. ORS is responsible for award document processing and assigns the highest priority to these actions. PIs should contact ORS if a sponsor asks for revised budget figures.

Post Award

The majority of post-award administration for sponsored projects is handled by AS. ORS assists with limited post-award administration.

No-Cost Extensions

In general, if an extension is anticipated, the PI should notify ORS at least sixty days prior to the scheduled project end date, and ORS will negotiate with the sponsor if necessary. The terms of the award agreement may specify a date beyond which an extension cannot be granted.

The PI should prepare a short justification for making the request. If a significant percentage of project funds remain unexpended a revised spending plan also should be submitted. Merely having unexpended funds generally is not sufficient justification to extend a project. Project extensions should not be requested for projects on which renewal is pending.

Modifications

There are certain circumstances in which ORS must contact the sponsor in order to receive approval for changes. These changes include:

- Changes in key personnel
 - When a PI leaves and hands over the grant to a Co-PI
 - When the PI transfers the grant to a new university
- Change in PIs
- Change in scope of work
- Changes in the budget

Reports

Reports may require the signature of a university authorized representative before submission. Please contact ORS to sign these reports. Financial reports and reports related to closeout are prepared by AS.

Personnel

Researchers should work with their department's business manager, or designated person, when hiring or appointing managerial, professional, or clerical staff on any award.

The administrative costs must be budgeted in the proposal or subsequently approved by the sponsor in writing. The Office of Human Resources (HR) maintains job descriptions and salary ranges which may be offered for managerial and professional personnel. HR will send all personnel forms, called ePAFs, to AS Research.

Non-US Citizens

Only persons holding specific visas are eligible for employment or to receive payment. In some cases, sponsors may forbid the hiring of non-US citizens to work on a project. Please consult your department chair with any questions.

Federal Demonstration Partnership

Texas Tech is one of the institutions selected nationwide to participate in the Federal Demonstration Partnership (FDP). Should your funding fall under the FDP terms and conditions, the remarks section of your notification and acceptance will state this. Questions or additional details on this program may be addressed to <u>Amy Cook</u>.

Accounting Services

AS facilitates the financial closeout of sponsored projects in Banner, the submission of all final non-technical reports, and final accounts receivable collections with external sponsors.

AS is part of the Division of Administration and Finance and is responsible for most post-award administration functions. A dedicated grant specialist within AS will assist with all post-award administrative activities and will address any and all issues, concerns, and questions you may have about the fully executed award, related compliance requirements, and institutional processes.

Your assigned grant specialist will provide the following services throughout the term of your project:

- Award Setup establish each project, cost share FOP, and the related budgets in Banner, Texas Tech's accounting system
- Award Management
 - Process and review budget revision requests
 - Approve procurement of federally funded equipment
 - Review certain project expenditures

- Review cost share commitments
- Address all questions and issues related to the financial administration of projects
- Obtain sponsor approval as needed
- Award Closeout coordinate the submission of all required closeout documents

The research administration tab on Raiderlink provides links to additional resources and financial Cognos reports to assist PIs with the financial administration of their projects.

Account Establishment

AS establishes sponsored project FOPs and budgets in Banner. The PI is assigned as the financial manager of the funds. PIs can designate other approvers through the TEAM application, and instructions are available in Banner to assist PIs in authorizing other approvers.

Accounting and Reporting

AS prepares and submits all invoices and financial reports to sponsors on behalf of the institution. The interval for billing and reporting will vary based on the agency as well as the award terms and conditions. Any questions or concerns about billing and reporting should be directed to the respective grant specialist.

Invoicing and reporting for projects may require departmental coordination. AS will work with PIs and departmental personnel to meet the billing and reporting obligations.

Accounts Receivable

AS is responsible for collecting revenue from sponsors. Often, interim and final payments are contingent upon the complete and timely filing of technical reports. Please be sure to communicate with your grant accountant specialist when technical reports are delayed.

Award Closeout

An automated email is sent out informing investigators of any closing awards ninety, sixty, or thirty days before a sponsored project ends. A grant specialist will contact investigators at the end of a project to review the closeout checklist provided in the closing awards report and assist with the closeout process.

Cost Accounting and Compliance

AS is responsible for the following, some of which may involve different points of contact on a less-frequent basis:

- F&A rate proposal
- Academic service center rate development
- Effort reporting
- Subrecipient monitoring
- ePAF approval
- eVerify compliance
- Various other internal and external reporting

Effort Reporting

All employees who receive salary support from sponsored projects must certify their effort. Effort certification provides assurance to sponsors that salaries charged to sponsored projects are reasonable in relation to the work performed and that commitments to sponsors have been met. Texas Tech uses the eCRT system to manage effort reporting. A link is provided on the Research Administration tab on Raiderlink. AS maintains the system and releases effort reports for certification semi-annually.

Faculty and project directors must attend effort training and an online training module is available. Each PI is required to certify every member of their research team who is supported by sponsored funding during the specified certification period.

End of Project

Once funding for a project ends, the PI will submit any final technical reports that may be required by the sponsor. You are not required to supply this report to the ORS, but a copy is appreciated.

The fiscal closeout of the award will be coordinated by AS. A PI will receive preliminary notifications of ending awards from AS, which includes a helpful checklist of items for consideration. The PI should review the preliminary document to ensure accurate reporting of project expenses.

Research Outcomes

Texas Tech has policies and procedures in place to manage the results and knowledge generated by research. All equipment and supplies purchased with project funds are the property of Texas Tech unless award documents state title vests with the federal government. All data, computer programs, culture collections, etc. produced during the project belong to Texas Tech.

Data Rights

Original data produced by the research project are owned by the university. This includes any information recorded in any form by the researcher or anyone working on the project, technical data, software code, flow charts, laboratory books, DNA sequences, viruses, cell lines, etc. The PI, along with the university, is responsible for the retention and appropriate dissemination of the data. The project sponsor also may have an impact on what is done with the data.

While the university owns the data, the PI has the right to publish the data and is encouraged to do so by the university. The PI is responsible for knowing if the funding agreement with the sponsor has any limits on or special requirements for publication. If patent protection is sought, this could result in a slight delay in publication.

Intellectual Property

All federal contracts and all NIH grants require a discoveries and inventions report at the end of the project period, regardless of whether any discovery has been disclosed or an invention filed. The report must be submitted on behalf of Texas Tech University. AS will assist with completing the report and will submit required forms. Please <u>contact AS</u> with any questions.

Intellectual property is any intangible property such as ideas, expressions, formulas, or any other creation of the mind. Intellectual property, like tangible real or personal property, may be bought, sold, or leased.

All patents and some copyrighted material resulting from research conducted by faculty, staff, and students, belongs to the university. While the Texas Tech University System has an ownership interest in intellectual property, the individual researcher can profit according to a schedule of royalty payments established by <u>Texas Tech Operating Policy</u> <u>74.04</u>.

If you leave the university, please see your department chair as far in advance of your departure as possible. Your chair, or the designee, will have a checklist to make your departure as smooth as possible. In some colleges, the dean or an associate dean will arrange an exit interview to obtain input on your time at Texas Tech.

HR has also created a leaving Texas Tech checklist to aid in making departure smooth.

EHS should be contacted about the proper procedures for storing materials and equipment, transferring materials and equipment, and cleaning the lab.

Please contact the HRPP or ACS to close or transfer any human or animal protocols used in your projects.

Completed Projects

If your projects are complete, please contact the ORS and AS to close out your grant accounts.

All equipment and supplies purchased with startup funds are the property of Texas Tech. In almost all cases equipment purchased on expired grants and contracts is also the property of Texas Tech. The university's policies on property management can be found in <u>OPs 63.07</u>, <u>63.08</u> and <u>65.14</u>. For more information, <u>contact the university</u> property manager. All data, computer programs, culture collections, etc. produced during the project belong to Texas Tech. Talk to your department chair about taking items or copies of documents with you.

Ongoing Projects

All equipment, instruments and supplies purchased with startup funds or project funds are the property of Texas Tech unless an award specifies title vests with the federal government. All data, computer programs, culture collections, etc. produced during the project belong to Texas Tech. Talk to your department chair about taking items or copies of documents with you.

If you have ongoing research projects and/or funding, please contact your department chair and ORS as early as possible to arrange for transfer of the accounts to a new institution. Not all projects can be transferred. Project transfer can be an unexpectedly lengthy process taking several months.

If someone else is taking over as PI or co-PI, contact ORS to arrange for the transfer of the project accounts. You will be required to submit a new electronic routing form, and a budget for the remaining balance.

Please contact HRPP or ACS to close or transfer any open human or animal protocols.

If you are transferring a project to a new institution, please follow these steps:

- Stop work and discontinue expenditure at Texas Tech
- AS must submit a final invoice and financial report to the sponsor
- ORS must notify the sponsor of intent to relinquish the project.
- Contact research services at the new institution as soon as possible to request a transfer. The following will be needed for a transfer:
 - \circ $\,$ Internal routing process forms required by the new institution
 - A budget of unexpended funds. An estimate is sufficient until final financial report is submitted by Texas Tech.
 - A brief proposal, or status report, describing project objectives that have been accomplished at Texas Tech and the objectives remaining to be accomplished at the new institution.
 - Submit human subject and/or animal use protocols or bio-safety protocols, and conflict of interest certifications to respective committees at the new institution.
- After Texas Tech has submitted both a relinquishment letter and a final financial report, the research services office at the new institution will submit a transfer request to the sponsor. The transfer request will include:
 - The completed transfer proposal
 - \circ A budget for funds to be transferred to and expended at the new institution
 - Assurances and compliance certifications

Reference Material

Acronyms

-A-

ACS – Animal Care Services AS – Accounting Services

-C-

Cayuse 424 Cayuse SP CITI – Collaborative IRB Training Initiative CSB – Chemical Safety Board

-E-

EHS – Environmental Health & Safety ePAF – Personnel Form System

-F-

F&A – Facilities & Administrative FDP – Federal Demonstration Partnership fMRI – Functional Magnetic Resonance Imaging FOP – Fund, Organization, Program

-H-

HR – Human Resources HRPP – Human Research Protection Plan

-I-

IACUC - Institutional Animal Care and Use Committee IRB – Institutional Review Board

-M-

MTA – Material Transfer Agreement

-N-

NIH – National Institute of Health

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NSF – National Science Foundation

-0-

- OHS Occupational Health & Safety
- OR&I Office of Research & Innovation
- ORC Office of Research Commercialization
- ORS Office of Research Services
- ORDC Office of Research Development & Communication

-P-

PHS – Public Health Services

-R-

RAC – Research Advisory Committee

- RCR Responsible Conduct of Research
- RFP Request for Proposal

-S-

SCAN - Swift Critique Appraisal & Notation Sessions SCANs – Safety Concern And Near Misses

-T-

TEAM – Financial and Personnel Software

TLPDC – Teaching Learning & Professional Development Center

TTUHSC – Texas Tech University Health Sciences Center