

Proposal Development Tiger Team Report - Draft One

Introduction

Achieving Tier 1 “Very High Research Activity,” as defined by the Carnegie Classification system, is an important aspect of the University of Alaska Fairbanks (UAF) long-term strategic research vision. In order to grow the UAF research enterprise, all units across campus must have access to highly effective, reliable proposal support and development.

Through a charge from Chancellor White and Interim Vice Chancellor for Research LaBelle-Hamer, the Proposal Development Tiger Team (PDTT) was convened in November 2020 to examine UAF’s current proposal development operations and provide recommendations for implementing an improved structure and support system capable of providing excellent service that is accessible to all. The goal is to present options that encourage the following:

- strong, consistent proposals submitted to a variety of funding agencies,
- redundancy in staffing for backup and cross-training,
- workload distribution across proposal coordinators,
- succession planning for personnel to maintain a high level of expertise, and
- an understanding of avenues for career development.

The team co-defined a four-stage process to develop a deep and common understanding of proposal development at UAF, gather information, synthesize results, and develop a plan to address the charge:

Stage 1 discussing and defining elements of proposal development services and support functions

Stage 2 researching proposal support structures at current and aspirational peer institutions

Stage 3 interviewing experts engaged in research at UAF

Stage 4 developing recommendations for consideration by leadership

Throughout **Stage 1**, the PDTT debated ideas and concepts that resulted in a shared definition of “proposal development” and set the stage for successive dialogue. The team identified ways to improve the current system and create additional capacity through a phased approach over time (see Appendix).

In **Stage 2**, team members examined a variety of proposal development systems and structures at institutions of higher education across the country with a focus on equivalent and aspirational peers, as defined by UAF Planning, Analysis and Institutional Research (PAIR). Equivalent peers are those institutions that roughly resemble our own, while aspirational peers are those institutions that our institution would like to resemble.

Major findings from this research include:

- Regardless of structure, staffing levels must be sized appropriately.
- Structure varied widely and included centralized, distributed and hybrid approaches. Some units were in the process of moving from centralized to decentralized; others were moving in the opposite direction.
- Structure must be built with organizational culture in mind and an eye toward growth and innovation.
- Aspirational peers have well-defined and significant research mentorship programs that often exist within an office separate from that of pre/post-award management.
- Roles and responsibilities for researchers, proposal development staff, and compliance offices are clear and well defined.
- Support tools and software (e.g. PIVOT) are critical.
- All principal investigators (PI’s) have equal access to information and proposal support.

In **Stage 3**, the PDTT invited experts from across UAF to share their ideas and experiences.

The committee conducted 10 separate group interviews with deans, directors, faculty and staff from institutes and colleges across campus. It is clear that our current proposal support system has evolved discontinuously across campus through the years. Unit leaders and proposal staff have independently adapted to heavier workloads, varying processes among departments, and uncoordinated efforts across campus in order to keep up with the growing demand for proposal submissions. These interviews were pivotal and helped to provide a more comprehensive understanding of the proposal development ecosystem at UAF.

Major ideas from interviews with research experts include:

- Better alignment between departmental proposal development and OGCA processes is necessary. Roles and responsibilities of all parties need to be clearly defined.
- Relationships built on trust are essential to the success of proposal development.
- Those involved in proposal development, including deans, directors, proposal writers and staff, must understand their roles and responsibilities and work together to maximize the success of every proposal submitted.
- While there is a need to improve the system, this process should be implemented carefully to avoid breaking elements that are working well.
- The perception of access to proposal development service, support and resources varies widely by unit across campus.
- Currently, growth of proposal development is extremely limited. Additional resources are required to expand access in order to ensure equity in proposal development support for all PI's across campus and to increase capacity to the level necessary to reach Carnegie Tier 1 research classification.

Major themes

In **Stage 4**, the team synthesized information from Stages 1-3 and identified three major thematic areas. First, relationships play a critical role in effective proposal development and need to be encouraged and fostered in a strategic manner across the entire institution. Second, many aspects of the proposal development system work well now and can be enhanced through additional collaboration, communication and coordination. Third, support for faculty and staff through mentorship, training and professional development is critical to advancing our research enterprise. Each of these themes is addressed below with accompanying recommendations.

Relationships: Enhancing a Team Approach

Connections between pre-award specialists and researchers are paramount to creating an effective proposal development system. Trust is built through consistent, reliable, responsive relationships in small teams of people working together to support proposal submissions. Proximity of proposal coordinators to research teams helps to develop and promote these relationships and to create a team-based approach with a high level of customer service. Relationships among proposal development staff are also critical and require an investment of time and attention to develop the full potential of a successful, interdependent campus system. The dialogue that evolved through the work of this committee is a good step in the right direction, should continue to be fostered, and involve all pre-award specialists.

Collaboration, Communication, and Coordination

Regular, consistent and strategic collaboration among pre-award specialists is necessary to grow our proposal development ecosystem. Collaboration among proposal writers (both faculty and staff) is critical to proposal development, and the recent work of the faculty development team along these lines is to be commended. Meetings among pre-award specialists and faculty development leaders would help spur collaboration and bring awareness to opportunities and challenges at all stages of proposal development efforts, from conception to submission.

We must share, promote, update, and extend tools such as boilerplates, templates and frequently asked questions in a variety of different formats and methods to reach everyone across campus. Items such as subaward toolkits with a complete array of necessary documents, ready-made contract packets, a range of facilities descriptions, individualized PI checklists for various sponsors, and related types of strategies would help coordinators and researchers across campus organize their overall approach to proposal development. While several departments make some of these resources available, a coordinated approach to maintaining a library of common tools across departments and units would increase efficiency and benefit everyone. The pre-award team can also help to locate specific expertise and establish connections among researchers required for large, interdisciplinary team proposals.

Coordination across UAF proposal development offices is critical as the system advances toward the Tier-1 goal. While proposal development is only one element of an overall strategic research development plan, this administrative system must develop concurrently as an integral part of the research engine. To increase metrics such as proposal turnaround time, timeliness of response to information requests, and number of proposals submitted/funded, the whole system needs to grow and levels of staffing need to reflect that growth. Roles and responsibilities among the pre-award staff as well as between pre- and post-award offices must be clarified to ensure smooth transitions for funded proposals. The current number of proposal development specialists is critically low and results in staff members working long and extended hours through weekends and holidays to address time-sensitive, detail-oriented, deadline-driven work.

Increasing staff and resources would help to address dangerous deficits in backup, redundancy and cross-training that exist today. Training early career proposal development staff and creating a formal UAF backup system for pre-award support will reduce the risk of single point failures if a unit does not possess the necessary expertise. With increased capacity, we can create a strong campus support system with specialized expertise groups across departments/units that are available to all proposal writers. Cross-training is required to build a resilient system and takes time, effort, appropriate staffing and coordination. All of these elements are crucial to a strong and healthy proposal development program.

Mentorship, Training, and Professional Development

UAF researchers require investments in mentorship, training and professional development. While the PDTT was not explicitly tasked with these considerations, this concept came across loud and clear through interviews, external institution research and conversations. PDTT members heard numerous requests from faculty who desire training and mentoring in writing/developing proposals and learning about the proposal submission process. Faculty believe that this investment will increase overall proposal competitiveness.

Current capacity-building programs such as NIH INBRE and NSF EPSCoR have an opportunity to contribute and scale up existing efforts and training to impact a greater number of proposal writers. Specific training, focused resources, and mentorship are required for different ranges of expertise. New

faculty require systematic, extended onboarding to UAF proposal development. Some of this training and development comes through deans and directors, but this effort and expertise varies widely across campus. Some deans and directors read all of the proposals submitted by their units and are well-versed in the various types of resources that are available to support proposal writers. Other leaders have less experience and/or involvement in the overall process, and this results in different experiences for proposal writers between one unit and another

In addition to investing in faculty, an investment in staff is equally important. Pre-award professionals must possess deep specialized knowledge of agency requirements and expectations and be well versed in proposal development. In order to acquire these skills, they must have professional development opportunities. Currently there is no defined career path or position classification in Research Administration. Employees doing this type of work are often classified under finance or administrative categories that do not adequately account for the skills, knowledge base or capabilities required to be effective in these positions. Professional organizations such as the National Organization of Research Development Professionals (NORDP), professional certification oversight bodies such as the Research Administration Certification Council (RACC), and recently minted graduate programs at John Hopkins, State University of New York (SUNY) and other institutions indicate that we need to carefully consider and recognize the level of professionalism that we require and possess. In order to grow our professional staff, we need to deliver mentorship, training, and professional development and work to identify a career ladder and succession plan for current positions.

Challenges and opportunities

One of the most significant challenges that UAF faces today is the excessive level of workload on proposal development staff. While there was a time when the number of proposals ebbed and flowed, that is no longer the case. A constant stream of proposals being submitted means there is no ability to strategize, catch up, or develop as an employee. However, across the board, every unit that attended the interviews requested more services and assistance than they have now. There appears to be solid agreement about the need to grow proposal development services, in particular to meet a growing demand for larger, more complex, cross-disciplinary proposals. In addition, federal and sponsor rules and regulations evolve, and staff must continue to keep pace and take time to understand the specifics of the changes and the impacts in order to do their jobs effectively.

With challenge comes opportunity. UAF must develop the competencies required to submit highly competitive proposals including writing proposals, reviewing proposals, technical editing, graphic design, project evaluation, hosting mock review panels and site visits, and more. UAF currently pays for some of these services through a variety of contractual services. If we build a professional and strategic research support structure with a wide range of skill sets and deep professional expertise, we will not only save money and grow our own specialists but also potentially turn what has been an expensive external endeavor into an income generating center for UAF that provides service to all. Various Tier 1 universities across the country have created teams to address these types of research support activities.

Next steps and implementation

One important step in growing UAF research is to advance proposal development, and we applaud our leadership for encouraging this step. We believe that the need currently exceeds the capacity for proposal development in many units. While we have the means to improve processes through

systematic collaboration, communication and coordination, we must grow research administration if we wish to both meet the current need and grow research. The appendix identifies elements of proposal development and offers a phased approach to enhancing the overall ecosystem. Many parts of the system are working well and we encourage leadership to be careful not to disrupt them by making substantial changes too fast. PDDT members desire and request the chance to lead and implement these changes and co-develop a fully functional team approach to proposal development across campus.

Addressing the items listed in Phase 1a (see Appendix) will enhance proposal development by increasing efficiency and establishing a more connected and coordinated ecosystem. However, the current level of staffing does not allow time for deep learning and training, and this challenge needs to be addressed with additional resources. While the charge to the PDDT focused specifically on proposal development, future efforts need to consider proposal development in a holistic manner and one situated within the larger context of research development.

This committee identified a number of specific ideas for improving proposal development at UAF that include the following:

- increase proposal development staff and research administration staff to promote and respond to an increasing number of awarded proposals,
- recruit and retain highly skilled staff and faculty who are adept at research development,
- support professional development opportunities, create a career path for proposal staff, and create a job class/family for research administration,
- support relationships among department proposal coordinators to create a fully functioning team approach across campus,
- establish a permanent proposal staff team to support large and complex proposals,
- identify proposal development staffing and resources to assist faculty in locating funding opportunities specific to their area of expertise or research focus,
- establish a handoff process to efficiently transition a project from department level pre-award to department level post-award,
- offer unit-focused workshops and training for individual and team researchers,
- mentor early-career researchers who are developing proposals,
- establish a clear delineation of roles and responsibilities of proposal development activities for every person involved with UAF research from deans and directors to faculty and staff,
- coordinated efforts through the VCR office to increase internal networking mechanisms in support of large and complex proposal development
- help faculty and staff join proposal writing teams as researchers, evaluators, survey designers, graphic artists, and community engagement experts,
- provide external networking mechanisms to promote experts at UAF to the broader research world,
- increase support resources such as red team reviews and external experts (e.g. The Implementation Group), or by developing comparable internal expertise, and
- examine current faculty workloads to identify their capacity to increase proposal submissions.

Conclusion

It is clear that UAF has significant proposal development expertise across campus and will benefit from a more concerted team approach to support, enhance and magnify current efforts. As a result of many factors, the current system is at or exceeds maximum capacity.

The PDTT is optimistic about the opportunities to enhance the UAF research enterprise through a phased approach as outlined in this report. The four themes highlight the depth of proposal development expertise that exists now and offers ideas for future development by:

- enhancing a coordinated, team approach,
- collaborating, communicating, and coordinating across UAF,
- providing mentorship, professional support and development, and
- initiating a successive conversation and implementation plan into Phase 1 and beyond.

This effort must be part of a broader conversation about research development and considered in the context of a more inclusive research plan for the future. Strategic investments are essential in order to grow our research development capacity, and there are numerous small but progressive changes that we can make now in order to foster a more efficient, inclusive and well-trained proposal development team.

Team members:

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Appendix: Proposal Development Services and Support Functions and Proposed Phases

Function (service, task and/or action)	Baseline	Phase 1a	Phase 1b	Future
Consistently offering faculty standardized assistance in navigating through administrative structures within the institution	Yes	X	X	
Project management / proposal development support for large, center-like proposals (coordinating milestones, internal deadlines, meetings, e-mail reminders, etc.)	Yes	X	X	X
Proposal development support for individual investigator awards / project management by proposal coordinator to ensure assigned workload remains on track, including coordinating with collaborating institutions (internal deadlines, meetings, e-mail reminders, etc.)	Yes	X	X	
Developing budgets and budget justifications for applications	Yes	X		
Providing support for Letters of Support/Biosketches/Conflict of Interest/Compliance	Yes	X	X	
Proposal submission support (copying, mailing, pdf generation, etc.)	Yes	X	X	
Assisting with just-in-time or additional information requests from sponsor after proposal submission	Yes	X	X	
Ensuring handoff from pre-award to post-award	Yes	X	X	
Completion of all sponsor and institutional forms (SF424, SF424A/B, SF33, routing form, Cost Accounting Standards (CAS) Exemption, subrecipient forms, Grants.gov application, etc.)	Yes	X		
Using funding sponsor platforms to upload proposal documents and complete required forms (NSPIRES, Grants.gov, Research.gov, etc)	Yes	X		
Ascertaining the proposal submission requirements, including funding sponsor proposal preparation/submission guidelines, and ensuring all proposal components are in compliance.	Yes	X	X	
Interpreting and explaining funding sponsor, federal, and institutional regulations/requirements. Notifying/advising PI if any aspect of the proposal may be out of compliance. <i>OPD does not expect the PI/Project Team to be aware of this information.</i>	Yes	X	X	
Explaining institutional (OGCA, travel, procurement, HR, etc.) policies, procedures, processes, expectations as needed	Yes	X	X	
Preparing support documents as required by proposal guidelines	Yes	X	X	

Routing/review and approvals through the department level, conforming with the established department level process	Yes	X		
Interfacing with OGCA for review, endorsement (<i>is there a different word for this?</i>), and submission.	Yes	X	X	
Drafting of Current & Pending Support data/form; then provided to PI for review/edit	Yes	X	X	
Assisting with updating CV/C&P for external collaborators	Yes	X	X	
Formatting proposal documents in accordance with sponsor requirements	Yes	X		
Assisting with all pre-proposals (Notice of Intent, Letter of Intent, Request For Information, Step 1, etc.) as needed	Yes	X	X	
Coordinating/communicating with the department (ensure department preferences are followed)	Yes	X	X	
Creating draft budgets / Rough Order of Magnitude (ROM) when needed (e.g. drafting budget to facilitate a conversation with a sponsor or collaborator, planning estimate, estimate of funds needed to hire grad student, etc.)	Yes	X	X	
Assisting students with funding opportunities that will be made to the student, as an individual, and not to UAF (scholarship, fellowship, travel award, etc.)	Yes	X	X	
Ensuring unit access to complete proposal files for multiple users	Yes	X	X	
Collaborating with Central administrative office to create/ provide resources for proposers (checklists, toolkits, step-by-step guides, etc.)	Yes	X	X	
Collaborating with Central administrative office to communicate relevant changes in processes, procedures, policies	Yes	X	X	
Creating institutional letters of support, collaboration, cost-sharing	Yes	X	X	
Assisting with, responding to, post-submission requests for information/revision	Yes	X	X	
Assisting investigator with obtaining access to sponsor proposal submission systems	Yes	X		
Proposal statistics - assessing unit's proposal performance and disseminating data reports to units	Sometimes	X	X	X
Assisting faculty to find funding opportunities	No	X	X	X
Communicating with PI's e.g. office availability, etc. (newsletters/listserv announcements of funding opportunities)	No			
Coordinating/gathering Core Facility information (Facilities document/boilerplate template, not determining facilities that will be used for project)	No	X		

Working with PI to ensure review comments are addressed per agency requirements part of the overall checklist for PI's; proposal compliance activity	No		X	X
Meeting with new investigators, prospective faculty/investigators, and new staff around campus to explain pre-award services/process	No	X	X	
Providing a variety of seminars, workshops, or outreach/education events each semester for faculty development; collaborative exercise	No	X	X	X
Proofreading/editing of Technical/Scientific portions of Application	No			X
Developing process/procedures for "Red Team" reviewers or external review	No			X
Providing graphic design, proposal figures/illustrations	No			X
Developing grant supplements/modifications	Depends	X	X	
Collaborating with deans and leadership to coach faculty into proposal activity (with a special focus on underserved units)	Depends	X	X	X
Working with Office of Research Integrity to encourage Responsible Conduct of Research training for proposal writing	Sometimes			X
Checking references/citations (obtaining DOI, PMID/PMCID, URL, checking order of citation, checking that the citation is correct)	Sometimes		X	X

Baseline: Services are currently provided across campus but are not always consistent.

Phase 1a: Near-term goals can be addressed by communication, coordination and collaboration to increase consistency across campus; minor investment is required to execute fully.

Phase 1b: Mid-term goals may be realized through additional investments.

Future: Function requires significant time and resources to address.