UAA Administrative Review Questionnaire – Spring 2020

Primary Unit: Office of Research (OR)

Subordinate Units: Office of Sponsored Programs (OSP)

Office of Research Integrity & Compliance (ORIC)
Office of Technology Commercialization (OTC)

Vivarium

Funding Note: While OR is funded by Fund 1, the source of Fund 1 is a

nearly even split between State Appropriation and

Recovered Facilities & Administration (F&A). Recovered F&A is funds received by the UAA in direct association with

expenditures of external funding.

1) What are the core functions of your unit that are funded in Fund 1 (i.e. Fund 104110)?

Office of Research

- Oversee and guide offices (OSP, ORIC) that ensure compliance with internal and external policies and regulations regarding research and expenditure of external funds.
- Oversee the trajectory of OTC which protects, promotes, and licenses UAA's intellectual property (IP) to the benefit of UAA and the IP holder.
- Oversee the operation of the Vivarium that houses research animals for campus-wide research and teaching purposes.
- Provide training to UAA's researchers to ensure they perform their research with integrity, honesty, and strong ethical standards.
- Identify research opportunities and potential funding sources, encourage their pursuit of these opportunities, and enable their participation through guidance, training, and streamlined administrative processes.
- Maintain and promote UAA's research reputation through sharing of achievements of our students, staff, and faculty.
- Provide seed funding and guidance to researchers in pursuit of UAA's mission statement.
- Act as the central office for all UAA units relating to research and management of restricted funding accounts (Fund 2).

- Develop, review, and submit proposals, ensuring compliance with University, State, Federal and other applicable rules, laws, and regulations.
- Negotiate and accept award external contracts and amendments.
- Create and manage accounts in the financial system of record for sponsored projects.
- Provide comprehensive post-award oversight during the full award, grant, contract, cooperative agreement, and foundation account lifecycle.

- Coordinate the billing process from invoice and report creation to payment posting;
- Act as liaison with sponsor/financial representatives for questions and audits.
- Facilitate processes required by 2 CFR 200, Board of Regents (BOR), and other sources - includes the grant effort certification and recertification processes;
- Maintain audit-ready files during retention periods, following appropriate file destruction procedure at the end of the period.
- Create and promote grantsmanship and research administration practices for UAA staff and faculty, to include development and dissemination of written processes, tools, trainings, and collaborative opportunities.

Office of Research Integrity & Compliance (ORIC)

- Ensure regulatory compliance, ethical and reasonable conduct, proper respect and concern for societal issues, and adequate safety and protections.
- Oversee and support: Boards and Committees required by University and Federal regulations.
 - o Human Subjects: Institutional Review Board (IRB)
 - Animal Care and Use: Institutional Animal Care and Use Committee (IACUC)
 - o Biosafety Committee
 - o Chemical Safety Committee
 - Native American Graves Protection and Repatriation Act (NAGPRA)
 Committee
 - o Radiation Safety Committee
 - Responsible Conduct of Research Committee
- Export control and sensitive information protection compliance and oversight (Serves regulatory requirements for all of UAA, not just the research enterprise)
- Initiate regulatory compliance policy formulation, review, and practices
- Ensure that UAA is properly represented in negotiation and approval of MOUs, DUAs, MOAs, and policy formulation and discussions.
- Develop and deliver training to the UAA community
- Maintain systems of record (required by regulators)
- Maintain certification and accreditation with regulatory agencies including:
 - the US Department of Human Health Services Office of Human Research Protections (OHRP)
 - USDA Animal and Plant Health Inspection Service (APHIS)
 - the National Institutes of Health Office of Laboratory Animals Welfare (OLAW)
 - US Department of Human Health Services Office of Human Research Integrity (ORI)
 - US Nuclear Regulatory Commission (NRC)
- Facilitate investigations allegations and reports of non-compliance
- Review and approve remediation/corrective measures and processes

• Communicate with regulators to request licenses and report non-compliance and un-anticipated events.

Office of Technology Commercialization (OTC)

- Generate and/or identify and develop commercializable intellectual property
 (IP) of UAA researchers and students.
- Protect UAA's IP through copyrights, patents, or licenses.
- Commercialize/monetize IP through sales, licenses, start-up companies, etc.
- Attract and facilitate industry sponsored research (ISR)

Vivarium

- Staff, maintain, and ensure safe operation of a 5925 sqft facility located in the ConocoPhillips Integrated Science Building for research and teaching using small animals.
- Provide a working space for UAA faculty, staff, and students to perform animal research.
- Ensure all regulations particularly pertaining to animal welfare are followed.
- Maintain vertebrate and invertebrate animal colonies used to conduct IACUC approved novel research.
- Provide safety and operational training to Vivarium users involved in animal care, cleanliness, disinfection, handling, and observation.

2) If one or more of these functions was reduced or discontinued, what would be the impact on:

a. More students persisting and completing educational goals?

Office of Research (OR)

 Opportunities for students to participate in funded co-curricular research would be decreased with reduced research promotion, solicitation, or internal support.

- Reduced ability to effectively process all external awards may lead to delayed or discontinuation of funding that enables students to pursue their educational goals. These programs provide funding on the order of \$19M restricted funds for UAA student aid, \$2M restricted funding student jobs in FY20. Such programs that OSP manages finances (for includes:
 - Federal Grant and Loan Programs (Pell and Direct Loans)
 - o TRIO
 - Upward Bound Program
 - ANSEP Awards
 - Many awards, led by a Faculty Investigator that directly support student success.

Office of Research Integrity & Compliance (ORIC)

- Reduced or discontinuation of internal compliance operations will yield corresponding increased level of risk associated with campus research activities or discontinuation of these activities.
- Students or Faculty currently maintain human subject research protocols for 75 student projects (including theses and dissertations) and 7 classlevel projects. Without the regulatory required committees and administration, these projects would need to be discontinued which may stop student academic progress and directly change course material which may affect accreditation.
- Those students that travel abroad may be unable to travel to complete their program if operations surrounding export control are reduced or discontinued.

Office of Technology Commercialization (OTC)

 Students in many academic disciplines engage in IP creation, that UAA subsequently protects. This may provide the driving force for their academic progress as their IP may yield future direct earnings or open additional career opportunities. Reduction or discontinuation in protecting this IP may result in less engagement by these students.

Vivarium

- Student opportunities, currently 25 research engaged students, may be reduced or discontinued. These students participate in co-curricular research activities that has been shown to improve their academic success.
- Reduction or discontinuation of the Vivarium would limit faculty's ability to
 use research animals in courses (note no animals are currently used in
 academic coursework but this facility is capable of supporting this activity).
- b. Supporting overall student, faculty and staff success in meeting UAA's mission?
 - OR is paramount to meeting UAA's mission "to discover and disseminate knowledge through teaching, <u>research</u>, engagement and creative expression." Beyond the direct statement of <u>research</u> in the mission statement, the Office's housed within OR enable external funding to flow into UAA that supports teaching, community engagement (training, workshops, etc.), and creative expression. Reduction or discontinuation of any of the Office's function will have a direct impact on its ability to fulfil the mission.
 - Reduction or discontinuation may result in inability to:
 - o Provide tools to assist researchers in finding external solicitations.
 - Provide seed funding necessary to be competitive or provide required match for external research solicitation.
 - Administer over 450 restricted funds and 500 proposals for external support annually.

- Maintain the 350 human research subject projects and 250 animal use and care projects. These project account for more than 80% of externally funded grants and contracts.
- Maintain export control compliance over 380 annual applications for international travel, international visitors, and international procurements.
- Protect UAA generated IP that has potential monetary value to the inventor/creator and UAA.
- Provide a safe and well-maintained animal care facility to enable research and teaching.
- c. Impacts to UAA's reputation, and ability to attract and retain students and/or external support?
 - OR provides a one of a kind and necessary service to UAA that enables and maintains research and many service activities through financial management, active financial and administrative compliance, and training. Current staffing levels are low, reductions correspondingly increase UAA's financial or compliance risk, leading to audit findings, and corresponding changes in our risk classification. Changes in this classification may result in reduced opportunity to pursue and maintain external funding/support. Significant reductions or discontinuation may lead to non-compliance resulting in disbarment.
 - UAA's Institutional Review Board is the board of record for the Alaska Health and Social Services, discontinuation would directly impact our reputation with the State of Alaska.
 - OR provides the services necessary for faculty and students to pursue, perform, and disseminate their research findings. It is dissemination of research that often is the forefront of what attracts and maintains students. In many rankings research productivity is used as a driver in rank determination. Reduction or discontinuation of services provided by OR will have a direct impact on research productivity, and subsequently our rankings among other universities.
- 3) Identify measures and targets used to monitor the impact of functions on each of the above (not all elements may be relevant for your unit, only address relevant items).

Office of Research (OR)

- Amount of monetary investment per proposal encouraged/supported, corresponding funded awards and subsequent student engagement.
 - \$10,000/proposal (FY20 Innovate Awards)
 - o Goal: 25% funding rate of encouraged proposals
 - Goal: 1 undergraduate and 1 graduate student on all proposal submissions.

- Training or development opportunities provided and corresponding faculty/staff engagement.
 - 1.5 hour per week Faculty/Staff Training
 - o 2 hour per month Dean/Director Research Development Planning
- Quantification of funding directly awarded to the OR
 - Number of proposals directly submitted by OR to support office or UAA wide research
 - Goal: 2 proposals (FY20, 5 proposals in FY21)

Office of Sponsored Programs (OSP)

- Proposal turn-around time (Goal: 5 business days)
- Number of proposal submissions (Goal: 80 per FTE)
- Number of active awards managed (Goal: 150 per Grant Analyst FTE)

Office of Research Integrity & Compliance (ORIC)

- Human Subject Research proposal turn-around time (Goal: 10 business days)
- Export Control application processing time (Goal: 2 business days)

Office of Technology Commercialization (OTC)

- Number of inventions disclosures (Goal: 5/year)
- Number of patents and copyright assignments (Goal: 3/year)
- Patent conversion ratio (Goal keep above national median 45%)
- FTE/License (Goal: keep below national median 36%)
- ISR revenue/research expenditures (Goal: 5%)
- Licensing income (New metric and Goal \$200K/year by FY23)
- Total OTC cost (target keep below \$190K year)

Vivarium

• Pass biannual IACUC inspections and annual USDA inspections are used to monitor the Vivarium's compliance.

4) What improvements have been achieved over the last five years?

Office of Research (OR)

 Utilization of a shared service model for human resources (as needed) and executive assistant support (0.25 FTE). (est. July 2019)

- In FY19 implemented a weekly review of OSP queues.
- Institution of a continuous improvement model with campus-wide stakeholder engagement through weekly Research Administrators Meeting initiated in FY20
 - Standard operating procedure (SOP) development in FY20
 - Planned implementation of continuous improvement model in FY21
- Full transition to paperless filing and processing beginning at start of FY20

• Reinitiated Monthly Research Administration Training in January 2020 that were discontinued in 2016.

Office of Research Integrity & Compliance (ORIC)

- Reduced the processing times for Human Subject Research proposals
- Developing smart forms to automate human subject research protocol submissions that will reduce research submission preparation time. (In process)
- Reduced the time of export control approvals to two business days.
- Implemented twice weekly review of IRBNet queue.
- Implemented once a month review of policies and procedures.
- Reconstituted and re-staffed all boards with engaged faculty and staff.
- Updated publicly published standard operation procedures to streamline processing.
- Established process for review of regulatory framework and UAA policies and SOPs.

Office of Technology Commercialization (OTC)

- Decreased OTC cost to the lowest since 2012 while increasing metrics
- In FY19 reached 14 invention disclosures (2 times the maximum annual invention disclosures in the previous four years)
- Generated patent conversion ratio of 90%
- Enabled an FTE/license ratio of 11%

Vivarium

- Installation of improved water treatment system for aquatic laboratories
- On-going development of a recharge center to improve long-term financial sustainability.

5) What efforts have your unit made to improve efficiencies and reduce costs? What was the result?

Office of Research (OR)

- Partnering with College of Engineering, Honors College, and Business Enterprise Institute for shared administrative services.
 - College of Engineering partnership (0.25 FTE executive assistant) has resulted in the OR 1.0 FTE executive assistant to remain vacant.
 - College of Engineering partnership on Human Resources tasks has resulted OR directly paying for a small amount staff time outside of the unit but not hiring an in unit human resources specialist.
 - Honors College partnership (Shared staff member 0.5 FTE) has resulted in the OSP not needing to hire another staff member.

- Business Enterprise Institute partnership has resulted in OR paying for service as needed to support fiscal function in all units in temporary capacity.
- Vice Provost for Research is currently acting in a leadership capacity and as Authorized Organizational Official for OSP. This change has resulted in an organizational structure change where the OSP Director position was not filled.

Office of Sponsored Programs (OSP)

- Pre- and Post- Award Managers have been reviewing, improving and disseminating processes related to OSP functions that reduce costs through eliminating duplicity, streamlining, automations, and replacing some human functions with computerized or software functions. Examples include:
 - Journal Voucher review process review with UAA Budget Office, delineated distribution of duties to remove duplication.
 - Development of improved processes of accepting, processing, and reviewing proposals. Reduced staff time at OSP and with department Research Administrators.
 - Improved transparency in OSP processes. Such as proposal and award queues. These have eliminated the time required and distraction incurred responding to "when will my proposal/award get processed/setup?" type questions.
 - Regular process improvement and training opportunities are provided by OSP that are offered in person, distance, recorded, and made available for at-will viewing. These reduce subsequent individual training requirements or individual questions, thus allowing more time to perform required tasks.
- Utilization of the shared service model during times of reduced staffing as well as a longer-term shared employee. Current shared arrangement is 0.5 FTE of an employee housed within by the Honors College.

Office of Research Integrity & Compliance (ORIC)

- Re-organized the office: lead to improved performance without cost increase. Flattened the reporting structure, and re-assigned functions to the Compliance coordinator, the IRB Administrator, the Associate Vice Provost, and the board chairs.
- Starting in February 2017 formulated and implemented new human subject research policies and processes to achieve timely high-quality reviews and oversight. Revised policies and procedures to meet the requirements of the final revision of the Common Rule. Developed new class projects procedures, human subject research determination procedures, engagement policies and determination process, and chemical safety plan. Implementing online training for HIPAA and Export Control compliance. Provides on-demand training for faculty at less cost annually that performing on-site training.

Office of Technology Commercialization (OTC)

 New commercialization strategy implementation underway - Focusing on monetizing of IP through licensing and collaboration with established companies.

Vivarium

- Vivarium Technician time is supplemented by researchers when their projects are utilizing technician time.
- Vivarium applies for supplemental grant funding.
- 6) List and <u>briefly</u> describe any current or proposed Board of Regents Policy, State or Federal mandates, or laws that require the continuation of your core function(s).

Office of Research (OR) as either oversight or direct implementation

UA BOR Chapter 10.07

Office of Sponsored Programs (OSP)

- UA BOR 10.07.020 and R10.07.020
- Current federal regulations
 - o A-81
 - o 2CFR 220, A.2(b), Appendix A

Office of Research Integrity & Compliance (ORIC)

- UA BOR 10.07.035, 10.07.060, 10.07.070, 10.07.075.
- U.S. Federal Policy for the Protection of Human Subjects
- US Animal Welfare Act
- US Public Health Service (PHS) regulations
- US 42 CFR 50
- Arms Export Control Act
- the US International Traffic in Arms Regulations (ITAR)
- the US Export Administration Act
- the US Export Administration Regulations (EAR),
- all economic and trade sanctions administered and enforced by the US Office of Foreign Assets Control (OFAC),
- US Atomic Energy Act, US Energy Reorganization Act,
- US National Environmental Policy Act,
- the National Institutes of Health Guidelines research involving recombinant DNA.
- IACUC is required to oversee the Vivarium.
- Agreement with AK Health and Social Services Public Health (PH) to serve as the PH board of record.

Office of Technology Commercialization (OTC)

- Bayh-Dole act
- BOR 10.07
- BOR approved UAA commercialization structure (Seawolf Holdings LLC)

<u>Vivarium</u>

- Regulations put forth by the following laws/agencies must be met to maintain a Vivarium:
 - Animal Welfare Act
 - Public Health Service Policy
 - National Institutes of Health (NIH) Guidelines for the Care and Use of Laboratory Animals
 - UAA Institutional Animal Care & Use Committee (IACUC) policies
 - Alaska Department of Fish and Game policies.
- 7) Potential cuts: Please describe any function reductions or eliminations that are feasible without significantly affecting UAA's mission fulfillment or its compliance mandates? Are any functions within your unit are duplicated elsewhere at UAA? Is there an opportunity for efficiency to be created by partnering or combining functions? Please describe the opportunities you identify within your unit and include the approximate dollar values and savings that would result.

Office of Research (OR)

- No functions are duplicated at UAA.
- Currently partnering with College of Engineering, Honors College, and Business Enterprise Institute for shared administrative services. Additional cuts will impact mission fulfillment.
- Funding used to seed research or meet required match obligations could be reduced if required. This reduction will have a direct correlation with reduced rate of research portfolio expansion.
- OR has been provided about \$150k per year to support research development (e.g. INNOVATE Awards, Pivot, directed faculty investment).

- No functions are duplicated at UAA.
- No reductions or eliminations are possible in OSP without loss of functionality which will increase UAA risk.
- Structure of OSP is such that it is capable ensuring it is "right sized" for our research portfolio. This is achieved through the staff being hired as term employees and the Fund 1 budget being nearly 50% funded by returned F&A. Thus, if our research portfolio is reduced, our returned F&A is reduced, reducing OSP's budget and corresponding need for staffing. For example, a 20-30% reduction in UAA's portfolio corresponds with the reduction of one of our Grant Analyst positions.

Office of Research Integrity & Compliance (ORIC)

- No functions are duplicated at UAA.
- No reductions or eliminations are possible in ORIC without loss of functionality which will increase UAA risk or require UAA to halt activities related to these compliance items.
- Compliance with federal regulations is required for UAA to meet its education and research mission. No other office is authorized to fulfill the functions of ORIC and the Institutional Official.

Office of Technology Commercialization (OTC)

- No functions are duplicated at UAA.
- Reduction in funding for OTC will directly correspond with reduction in or nature of securing UAA's IP. For example, UAA could reduce the number of active patent pursuits as these require UAA staff time, support of external legal, and other patent costs.
- A reduction of about \$10k per year per patent (typical 3 year per patent –
 i.e. \$30k per patent) in legal and application fees is estimated. Budget for
 legal fees is about \$150k per year.
- There is potential for partnership with Business Enterprise Institute to improve commercialization opportunities (e.g. start-ups).

Vivarium

- No functions are duplicated at UAA.
- Reduction in funding is not recommended due to active externally funded research in the Vivarium that must meet State and Federal regulations.
- Reduced funding for the Vivarium would need to be planned and a transition to a model to be fully externally funded or discontinued would need to be made in accordance with regulation and animal safety/care in mind.
- Elimination of Fund 1 associated with the Vivarium is about \$100k per year.