

Strategic Planning and Budget Advisory Committee (SPBAC)
Budget Increment Request Form

PURPOSE: Use this form to propose new UAS operating fund increments or initiatives (e.g. legislative requests for programs or positions) which require either NEW resources or a major internal REALLOCATION of existing funding. Individuals preparing proposals should consult with their dean or director prior to submitting to SPBAC.

For more routine and/or modest proposals affecting existing department or program budgets, please consult UAS Personnel Budget Procedures & Practices (<http://uas.alaska.edu/budget/docs/budget/uas-personnel-budget-procedures-practices.pdf>).

Increment Title:	Tenure-Track Assistant Professors of Biology/Fisheries – 2 positions	
Campus/Department or Program:	School of Arts and Sciences, Department of Natural Sciences, Biology Program	
Fiscal Year/Time Frame	FY16 & FY17 continuing	
Submitted by:	Carolyn Bergstrom, David Tallmon	Date: October 28, 2014

A. Program/Position Description *(Provide a description of the request and of its overall purpose)*

This initiative requests funding to hire two tripartite, Juneau-based, tenure-track faculty members in the Biology program, both of which will be jointly-appointed in the University of Alaska Fairbanks’s School of Fisheries and Ocean Sciences (SFOS). One faculty member will be a Fisheries Geneticist that will teach Genetics (BIOL 362) at UAS and Population Genetics at SFOS; the second will be an Aquaculture Pathologist that will teach Microbiology (BIOL 240) at UAS and Fish Pathology at SFOS. Both faculty members will teach additional courses depending upon their disciplinary expertise and instructional needs of the institutions; engage UAS undergraduates and SFOS graduate students in their research programs; and contribute to the service missions at both institutions.

B. Need & Justification for Program/Position *(Explain why the request is needed, including enhancement of existing programs, response to market demand, taking advantage of new opportunities. If applicable, include the number of students affected and specific employer demand met.)*

The Biology Program at the University of Alaska Southeast has experienced long-term increases in enrollments in our lower and upper division courses, and many courses have required increases in the number of sections offered in order not to turn away program students. The number of BS/BA students graduating with a degree in Biology and Marine Biology has increased from 2009 and the number of students graduating with a minor in Biology has more than doubled. This growth has been concurrent with a decrease in available full-time tenured faculty instructors in the Biology program, with additional losses eminent in the near future due to retirements.

Presently the Biology program at UAS and the SFOS Fisheries program have student demand and workload needs for two fulltime tenure-track faculty members who can contribute broadly to both programs. We have major gaps in our program that include course coverage, service involvement and research development. With respect to teaching we require full time tenure-track faculty with expertise in Genetics (Biology 362), Microbiology (Biology 240), and Oceanography.

Our Genetics course was taught for many years by SFOS Full Professor Tony Gharrett. Dr. Gharrett retired in 2010, leaving instruction for this required biology course vacant. We managed to find graduate students to teach the course for the last four years, but these were first-time instruction experiences for these graduate students and the quality of the course declined. We now have no permanent faculty available to teach this course without creating significant teaching gaps elsewhere in our program and 6 year course sequence. SFOS faculty are also invested in finding an instructor for Genetics for their Fisheries students, and are looking for someone that can also teach a graduate level course in Fisheries Population Genetics. Therefore SFOS is in support of a joint genetics position that is shared 50% both in workload and in financial support.

The UAS Microbiology course (Biology 240) supports the UAS Health Sciences program, and is currently taught by a term faculty member. We would like to find a permanent faculty member to teach this course for us as well as possibly a course in Oceanography, which would greatly strengthen our Marine Biology program (as well as a Fisheries program) but has not been offered in years due to lack of faculty. SFOS is interested in finding a faculty member with expertise in microbiology to teach a course in fish pathology for their fisheries graduate students, and supports a 2nd joint position for a microbiologist/pathologist that is also shared 50% in workload and financial support.

Therefore, in order to maximize efficiency, cover our program needs, and enhance collaboration between institutions, we are proposing two shared positions (50:50 workloads) with UAF. Even with these two 50% positions filled, UAS will still have faculty gaps in Marine Biology (B.S.) and Biology (B.S. and B.A.). We currently have a term faculty member who will retire in Fall 2015 who teaches Biology 103 (Biology and Society), Biology 239 (Introduction to Plant Biology), Biology 111 and 112 (A&P labs) and Biology 300 (Vertebrate Zoology). This proposal is an urgent request for help in continuing to offer the excellent curriculum in our Biology and Marine Biology programs that is increasingly requested by Alaskan and other students from the lower 48 states.

With declining budgets and a need to focus our work on areas of excellence, investment in the Biology program should be a priority for the university. Our stellar setting in Southeast Alaska, the excellent and unique laboratory facilities, and the lack of competing programs in Alaska and the entire west coast make us a destination campus for undergraduates to earn their Marine Biology, Biology, and potentially Fisheries Biology degrees. Strengthening these programs through the addition of committed faculty, shared with UAF, is a smart move because it plays to a fundamental strength of UAS.

C. UAS Mission & Core Themes (*Identify which aspects of the UAS Mission and Core Themes this request supports and explain how it advances the mission and themes.*)

Student Success: Students learn best, and are retained and persist to graduation when they develop relationships with faculty mentors. Full-time faculty members are positioned to be those mentors throughout a student's education. Term and adjunct faculty do not provide the consistency and investment that permanent faculty provide. In addition, with our new ANSEP program for marine biology students in place and becoming increasingly active, the Biology Department is attracting increasing numbers of students, many of whom have shown interest in Fisheries Biology. Having Fisheries-focused UAS faculty would be an additional draw for those students and provide them with long-term mentoring.

Teaching and Learning: Student learning requires consistent instruction by highly qualified and committed faculty. These faculty are critical, not just for instruction, but for advising, mentoring, providing undergraduate research opportunities, placement in internships, and consistent course offerings. As recently identified by the MacDowell Group surveys, these relationships are key factors in retaining and graduating undergraduate students.

Community Engagement: Faculty with specialties in Genetics and Fish Pathology would likely forge professional relationships with the Douglas Island Pink and Chum Hatchery in Juneau, one of the largest hatcheries in the region. In general, permanent Biology faculty collaborate with scientists in state and federal agencies to conduct research and interact with the community through talks, tours, presentations, and mentoring. Because of the accessibility of their discipline, biology faculty are some of the most active UAS faculty in mentoring high school students on science fair projects, participating in BioBlitz, volunteering for intertidal walks as fundraisers, donating their time to the “I’m Going To College” program, mentoring Girl Scouts, and participating in the regional Ocean Sciences Bowl.

Research and Creative Expression: Additional permanent faculty actively pursuing research will provide crucially needed opportunities for our students to learn through doing. The current small number of permanent Biology faculty with research programs (five) does not provide enough opportunity for increasing numbers of students seeking out research experience or internships with UAS mentors. There are always more students requesting research experience than we have faculty to mentor. Undergraduate research experiences lead to greater student retention, provide students with practical skills, and lead to relevant employment after graduation. Term and adjunct faculty do not provide student learning opportunities through research.

D. UA Statewide Priorities: Shaping Alaska’s Future *(Identify which of the five themes and issues this request supports and explain how.)*

Theme 1: Student Achievement and Attainment: Students learn best, and are retained and persist to graduation when they develop relationships with faculty mentors. Full-time faculty members are positioned to be those mentors throughout a student’s education. Term and adjunct faculty do not provide the consistency and investment that permanent faculty provide. In addition, with our new ANSEP program for marine biology students in place and becoming increasingly active, the Biology Department is attracting increasing numbers of Alaska Native students, many of which have shown interest in Fisheries Biology. Having fisheries-focused UAS faculty would be an additional draw for those students and provide them with long-term mentoring.

Theme 3: Productive Partnerships with Public Entities and Private Industries: The Douglas Island Pink and Chum Hatchery has expressed interest in collaborating with a fish pathologist, and a joint hire by UAS and SFOS of a faculty member with this specialty would provide for the development of this collaborative relationship.

Theme 4: Research and Development (R&D) to Sustain Alaska’s Communities and Economic Growth: Tripartite faculty members who are responsible for conducting research will engage in a meaningful way with industry partners. Our current faculty have already demonstrated this with ongoing effective partnerships with NOAA, NMFS, ADF&G, Glacier Bay National Park, and others.

Theme 5: Accountability to the People of Alaska: Faculty members with a commitment to the University are more likely to fulfill the long-term mission and goals of UAS and be accountable to the students and the people of Alaska for providing a high quality, consistent, meaningful education for Alaskan students.

E. Other Strategic Priorities *(Explain how this request relates to any other local, regional, or statewide priorities)*

Currently, the University of Alaska Fairbanks offers two undergraduate degrees in Fisheries (Bachelor of Science, Bachelor of Arts). The University of Alaska Southeast is in active discussions about jointly offering these two undergraduate fisheries degrees with UAF—with a goal of doubling the number of Southeast Alaska students who complete their BS or BA degree in Fisheries over the next three years. This proposal for two shared faculty between UAF and UAs would support this discussed goal.

Having a joint fisheries faculty position based in Juneau will open the door for even greater development of partnerships with the K-12 system in Southeast Alaska communities and alignment of career pathways with the UAS Fisheries Technology program.

F. OMB Performance Measures *(Identify the anticipated positive impact of the request on each performance measure or the negative impact of not receiving a replacement funding request.*

See: http://uas.alaska.edu/provost/ie/docs/OMB_performance_measures.pdf)

Student success: High demand career pathways

INCREASE: Additional faculty will lead to additional recruitment and retention of biology and fisheries students who will enter high demand jobs in fisheries and natural resource management in the state of Alaska. Additional faculty members will form new and stronger partnerships with the agencies that hire our graduates. Term and adjunct faculty cannot provide this advantage.

Student success: Success in entry level college courses

INCREASE: Students recruited to the biology program are more likely to be ready and able to succeed in college, particularly if we begin marketing to students in selected areas of the west coast. In addition, faculty mentoring in combination with the ANSEP program is improving student study skills and student/mentor relationships that lead to greater student success.

Student success: Full enrollment

INCREASE: Expert advising of our program students by faculty advisors and by our staff advisors will lead to more students completing 30 credits per year. Further, the types of students we recruit for the Biology major are more likely to have the college-level skills to maintain a full 15 credits per semester.

Student success: Undergraduate retention and persistence

INCREASE: Students in Biology (and potentially in Fisheries in the near future) are here specifically for our program. They are more likely to be retained and graduate than undeclared students are, as they are committed not only to completing their general education requirements and transfer to the lower 48, but also to completing the baccalaureate degree. Adding two faculty members, shared with UAF, will stabilize our course offerings and provide predictable instruction that students use to plan their coursework. These are key elements in student retention and success.

Student success: Degree attainment

INCREASE: Full-time faculty will increase our ability to offer enough courses and enough sections for students to graduate on time. In addition, they will advise and mentor students effectively. Graduation rates increase when courses are offered predictably, consistently, and by permanent faculty.

Student success: Post-graduation employment

INCREASE: Biology and Fisheries students generally go directly to jobs in the state and federal agencies or to graduate school. Our record of success is already good, and should only increase with additional stability in the

program. Our students who are provided independent research opportunities have the greatest employment success after leaving UAS. Additional faculty members will increase student research opportunities that adjuncts and terms cannot provide.

Teaching and Learning: Instructional expenditures per student FTE

NO EFFECT: Addition of two 50% faculty will decrease the number of term and adjunct employees each year, as well as decrease costs and time invested in frequent searches for new temporary instructors. Financially this will have little to no effect.

Teaching and Learning: Faculty to completers

DECREASE: With an increase in stable permanent faculty, we should see an increase in graduation rates within the program. We can offer courses more often and increase the diversity and consistency of offerings.

Teaching and Learning: Structured experiential learning

INCREASE: Additional faculty will immediately increase the opportunities through classroom, laboratory, field trip, and undergraduate research experiences.

Teaching and Learning: Honors Program

INCREASE: Additional faculty advising and research opportunities for biology and fisheries students will lead to additional honors-eligible students. Honors courses require faculty to provide opportunities outside of the regular coursework. It is difficult for the small number of current faculty to teach the courses offered by our program, not to mention additional coursework. Additional faculty will help to meet that need.

Community Engagement: Workforce credentials

NO EFFECT: While the Biology Program engages routinely in partnerships and services throughout the community, UAS does not have a metric that would measure this effort. The Program does not offer non-credit activities leading to workforce credentials but does place students into internships with agencies that hire our graduates.

Research and Creative Expression: Research proposals

INCREASE: Highly qualified Biology faculty will secure grant funding that provides student research opportunities.

Research and Creative Expression: Research assistants

INCREASE: All faculty are asked to fund undergraduate research assistants in the grant proposals they write, as long as that is not prohibited by the grant. Successful faculty routinely hire undergraduate assistants to assist in laboratory and field research. These are opportunities that term faculty, bipartite faculty, and adjuncts cannot provide.

G. How does the increment promote academic excellence, optimize existing capacity, and/or create efficiencies or cost savings?

In particular, this proposed increase in faculty is unique and would maximize efficiency in that both positions would be shared between UAS and UAF in cost, facility support, workload (50:50), and resulting benefits brought to both institutions.

In general, it is optimal to teach a program with tenure track faculty who are committed to the students, the university, the research, the teaching, and to the SE Alaska community. This is efficient because it creates consistent advising, course offerings, and program development, providing students with a stable faculty and providing the university with the ability to plan for the future. It eliminates the drain on administrators and staff of constantly identifying and hiring adjunct and term faculty who teach for a semester or two. Short-term faculty members do not

provide research opportunities for students or service to the university and community. Tenure track faculty build research programs that bring funding and prestige to the university and provide opportunities to students to conduct research. Tenure track faculty develop partnerships with state and federal agencies that expand our capacity and leverage resources for the betterment of the institution, our students, and our graduates.

H. Budget (Explain the amount of funds requested for non-personal services expenses such as salary and benefits, travel, contractual, commodities, and capital expenditures. Provide a brief description of the expenditures.)

FTE: 2 full-time, tri-partite UNAC faculty positions at UAS with joint appointment in UAF SFOS
(Provide the number/fraction of full-time equivalent positions requested and type, e.g. faculty or staff.)

Category	Amount	Description
Salary and Benefits	FY16: \$96,300 FY17: \$96,300 Total: \$192,600	Two jointly-appointed faculty positions: FY16 is in BOR request for to legislature; FY17 would be a priority for UAS and/or UAF reallocation and/or legislative funding
Travel		
Contractual		
Commodities		
Capital Expenditures		
Total Requested:	FY16: \$96,300 FY17: \$96,300 Total: \$192,600	FY16: GF 77.0 NGF 19.3 Total 96.3 FY17: GF 77.0 NGF 19.3 Total 96.3 Total: GF 154.0 NGF 38.6 Total 192.6

I. Facilities or other resources (Explain what facilities needs might be associated with this request—e.g. office space, lab, shop, IT infrastructure, larger equipment)

Recruitment and hire of new faculty in these disciplines would require a one-time start-up funding package to be negotiated for establishing their research and teaching activities at UAS/UAF. Housing these faculty members on the UAS campus will require each to have a permanent, private office and a lab. Office space is available in the newly remodeled Anderson building, and David Tallmon is able to share his laboratory research space with a geneticist and to make room to include the additional undergraduate student researchers this faculty member would bring into the Anderson Building. In addition, UAF’s SFOS has additional researcher laboratory space at Lena Point, as well as teaching lab space for the additional lab sections these faculty would be able to provide.

J. Review by Dean/Director

Karen Schniitt

Dean/Director signature reflecting consultation about proposed increment/initiative

SPBAC Recommendation to Executive Cabinet:

Pursue funding through: Legislative Request Institutional reallocation School reallocation Other

Do not pursue funding at this time

SPBAC comments to Executive Cabinet:
