FDP Cost Reimbursement Subaward						
Federal Awarding Agency:						
Pass-1	Through Entity (PTE):	Subrecipient:				
PTE PI:		Sub PI:				
PTE Fe	deral Award No:	Subaward No:				
Project	Title:					
Subawa Start:	ard Budget Period: End:	Amount Funded This Action (USD): \$				
	ed Period of Performance: End:	Incrementally Estimated Total (USD): \$				
	Terms and	Conditions				
1.	PTE hereby awards a cost reimbursable subaward, (as dete and budget for this Subaward are as shown in Attachment sindependent entity and not an employee or agent of PTE.	ermined by 2 CFR 200.331), to Subrecipient. The S				
2.	Subrecipient shall submit invoices not more often than monthly and not less frequently than quarterly for allowable costs incurred. Upon the receipt of proper invoices, the PTE agrees to process payments in accordance with this Subaward and 2 CFR 200.305. All invoices shall be submitted using Subrecipient's standard invoice, but at a minimum shall include current and cumulative costs (including cost sharing), breakdown by major cost category, Subaward number, and certification, as required in 2 CFR 200.415(a). Invoices that do not reference PTE Subaward number shall be returned to Subrecipient. Invoices and questions concerning invoice receipt or payments shall be directed to the party's Contact, shown in Attachment 3A.					
3.	A final statement of cumulative costs incurred, including costs Contact, as shown in Attachme The final statement of costs shall constitute Subrecipient's f	nt 3A, not later than 60 days after	ΓE's			
4.	All payments shall be considered provisional and are subject adjustment is necessary as a result of an adverse audit find		e event such			
5.	Matters concerning the technical performance of this Subavas shown in Attachments 3A and 3B. Technical reports are		ncipal Investigator			
6.	Matters concerning the request or negotiation of any changes in the terms, conditions, or amounts cited in this Subaward, and any changes requiring prior approval, shall be directed to the PTE's Contact and the Subrecipient's Contact shown in Attachments 3A and 3B. Any such change made to this Subaward requires the written approval of each party's Authorized Official as shown in Attachments 3A and 3B.					
7.	The PTE may issue non-substantive changes to the Budge modification shall be considered valid 14 days after receipt Subrecipient's Contact, as show					
8.	Each party shall be responsible for its negligent acts or omi or directors, to the extent allowed by law.	ssions and the negligent acts or omissions of its em	nployees, officers,			
9.	Either party may terminate this Subaward with 30 days written notice. Notwithstanding, if the Awarding Agency terminates the Federal Award, PTE will terminate in accordance with Awarding Agency requirements. PTE notice shall be directed to the Contact, and Subrecipient notice shall be directed to the Contact as shown in Attachments 3A and 3B. PTE shall pay Subrecipient for termination costs as allowable under Uniform Guidance, 2 CFR 200, or 45 CFR Part 75 Appendix IX, as applicable					
10.	By signing this Subaward, including the attachments hereto which are hereby incorporated by reference, Subrecipient certifies that it will perform the Statement of Work in accordance with the terms and conditions of this Subaward and the applicable terms of the Federal Award, including the appropriate Research Terms and Conditions ("RTCs") of the Federal Awarding Agency, as referenced in Attachment 2. The parties further agree that they intend this subaward to comply with all applicable laws, regulations, and requirements.					
By an A	Authorized Official of the PTE:	By an Authorized Official of the Subrecipient:				
	Hilton Hallock	David T. Wilson				
Name: Title:	Date	Name: Title:	Date			

Attachment 1 Certifications and Assurances

Certification Regarding Lobbying (2 CFR 200.450)

By signing this Subaward, the Subrecipient Authorized Official certifies, to the best of his/her knowledge and belief, that no Federal appropriated funds have been paid or will be paid, by or on behalf of the Subrecipient, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement in accordance with 2 CFR 200.450.

If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or intending to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the Subrecipient shall complete and submit Standard Form -LLL, "Disclosure Form to Report Lobbying," to the PTE.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Debarment, Suspension, and Other Responsibility Matters (2 CFR 200.214 and 2 CFR 180)

By signing this Subaward, the Subrecipient Authorized Official certifies, to the best of his/her knowledge and belief that neither the Subrecipient nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction by any federal department or agency, in accordance with 2 CFR 200.213 and 2 CFR 180.

Audit and Access to Records

Subrecipient certifies that it will provide PTE with notice of any adverse findings which impact this Subaward. Subrecipient certifies compliance with applicable provisions of 2 CFR 200.501-200.521. If Subrecipient is not required to have a Single Audit as defined by 200.501, Awarding Agency requirements, or the Single Audit Act, then Subrecipient will provide notice of the completion of any required audits and will provide access to such audits upon request. Subrecipient will provide access to records as required by parts 2 CFR 200.337 and 200.338 as applicable.

Program for Enhancement of Contractor Employee Protections (41 U.S.C 4712)

Subrecipient is hereby notified that they are required to: inform their employees working on any federal award that they are subject to the whistleblower rights and remedies of the program; inform their employees in writing of employee whistleblower protections under 41 U.S.C §4712 in the predominant native language of the workforce; and include such requirements in any agreement made with a subcontractor or subgrantee.

The Subrecipient shall require that the language of the certifications above in this Attachment 1 be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

Use of Name

Neither party shall use the other party's name, trademarks, or other logos in any publicity, advertising, or news release without the prior written approval of an authorized representative of that party. The parties agree that each party may use factual information regarding the existence and purpose of the relationship that is the subject of this Subaward for legitimate business purposes, to satisfy any reporting and funding obligations, or as required by applicable law or regulation without written permission from the other party. In any such statement, the relationship of the parties shall be accurately and appropriately described.

Prohibition on Certain Telecommunication and Video Surveillance Services or Equipment

Pursuant to 2 CFR 200.216, Subrecipient will not obligate or expend funds received under this Subaward to: (1) procure or obtain; (2) extend or renew a contract to procure or obtain; or (3) enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services (as described in Public Law 115-232, section 889) as a substantial or essential component of any system, or as a critical technology as part of any system.

Attachment 2

Federal Award Terms and Conditions

Subaward Number

Required Data Elements

Awarding Agency Institute (If Applicable)

The data elements required by Uniform Guidance are incorporated

Federal Award Issue Date

FAIN

Assistance Listing No.

This Subaward Is:

Assistance Listing Program Title (ALPT)

Research & Development

Subject to FFATA

Key Personnel Per NOA

General Terms and Conditions

By signing this Subaward, Subrecipient agrees to the following:

- 1. To abide by the conditions on activities and restrictions on expenditure of federal funds in appropriations acts that are applicable to this Subaward to the extent those restrictions are pertinent. This includes any recent legislation noted on the Federal Awarding Agency's website:
- 2. 2 CFR 200
- 3. The Federal Awarding Agency's grants policy guidance, including addenda in effect as of the beginning date of the period of performance or as amended found at:
- 4. Research Terms and Conditions, including any Federal Awarding Agency's Specific Requirements found at:

except for the following:

- a. No-cost extensions require the written approval of the PTE. Any requests for a no-cost extension shall be directed to the Contact shown in Attachment 3A, not less than 30 days prior to the desired effective date of the requested change.
- b. Any payment mechanisms and financial reporting requirements described in the applicable Federal Awarding Agency Terms and Conditions and Agency-Specific Requirements are replaced with Terms and Conditions (1) through (4) of this Subaward; and
- c. Any prior approvals are to be sought from the PTE and not the Federal Awarding Agency.
- d. Title to equipment as defined in 2 CFR 200.1 that is purchased or fabricated with research funds or Subrecipient cost sharing funds, as direct costs of the project or program, shall vest in the Subrecipient subject to the conditions specified in 2 CFR 200.313.
- e. Prior approval must be sought for a change in Subrecipient PI or change in Key Personnel (defined as listed on the NOA).
- 5. Treatment of program income:

Special Terms and Conditions:

Data Sharing and Access:

Subrecipient agrees to comply with the Federal Awarding Agency's data sharing and/or access requirements as reflected in the NOA or the Federal Awarding Agency's standard terms and conditions as referenced in General Terms and Conditions 1-4 above.

Data Rights:

Subrecipient grants to PTE the right to use data created in the performance of this Subaward solely for the purpose of and only to the extent required to meet PTE's obligations to the Federal Government under its PTE Federal Award.

Copyrights:

to PTE an irrevocable, royalty-free, non-transferable, non-exclusive right and license to use, reproduce, make derivative works, display, and perform publicly any copyrights or copyrighted material (including any computer software and its documentation and/or databases) first developed and delivered under this Subaward solely for the purpose of and only to the extent required to meet PTE's obligations to the Federal Government under its PTE Federal Award.

Subrecipient grants to PTE the right to use any written progress reports and deliverables created under this Subaward solely for the purpose of and only to the extent required to meet PTE's obligations to the Federal Government under its Federal Award.

Promoting Objectivity in Research (COI):

Subrecipient must designate herein which entity's Financial Conflicts of Interest policy (COI) will apply:

If applying its own COI policy, by execution of this Subaward, Subrecipient certifies that its policy complies with the requirements of the relevant Federal Awarding Agency as identified herein:

Subrecipient shall report any financial conflict of interest to PTE's Administrative Representative or COI contact, as designated on Attachment 3A. Any financial conflicts of interest identified shall, when applicable, subsequently be reported to Federal Awarding Agency. Such report shall be made before expenditure of funds authorized in this Subaward and within 45 days of any subsequently identified COI.

Work Involving Human or Vertebrate Animals (Select Applicable Options)
No Human or Vertebrate Animals
Human Subjects Data (Select One)
Tidinan Subjects Data (Ocicci One)
Additional Terms

Attachment 3A

Pass-Through Entity (PTE) Contacts

PTE Information							
Entity Name:							
Legal Address:							
Website:							
PTE Contacts							
Central Email:							
Principal Investigator Name:							
Email:	Telephone Number:						
Administrative Contact Name:							
Email:	Telephone Number:						
COI Contact email (if different to above):							
Financial Contact Name:							
Email:	Telephone Number:						
Email invoices? Yes No Invoice email (if different):							
Authorized Official Name:							
Email:	Telephone Number:						
PI Address:							
Administrative Address:							
Invoice Address:							

Attachment 3B

Subaward Number:

Research Subaward Agreement Subrecipient Contacts

Subrecipient Information for FFATA reporting Entity's UEI/DUNS Name: Institution Type: EIN No.: Currently registered in SAM.gov: No Yes UEI / DUNS: Exempt from reporting executive compensation: Yes No Parent UEI / DUNS: (if no, complete 3B pg2) Place of Performance Information for FFATA reporting Physical Address, City, State (if U.S.) and Country: U.S. Entities only (insert information for Place of Performance): Congressional District: Zip Code+4: Zip Code Look-up **Subrecipient Contacts** Central Email: Website: Principal Investigator Name: Email: Telephone Number: Administrative Contact Name: Email: Telephone Number: Financial Contact Name: Email: Telephone Number: Invoice Email: Authorized Official Name: Email: Telephone Number: Legal Address: Administrative Address:

Payment Address:

Attachment 3B-2

Highest Compensated Officers

Subrecipient:
Institution Name:
PI Name:
Highest Compensated Officers
The names and total compensation of the five most highly compensated officers of the entity(ies) must be listed in the entity in the preceding fiscal year received 80 percent or more of its annual gross revenues in Federal awards; and \$25,000,000 or more in annual gross revenues from Federal awards; and the public does not have access to this information about the compensation of the senior executives of the entity through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. §§ 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. See FFATA § 2(b)(1) Internal Revenue Code of 1986.
Officer 1 Name:
Officer 1 Compensation:
Officer 2 Name:
Officer 2 Compensation:
Officer 3 Name:
Officer 3 Compensation:
Officer 4 Name:
Officer 4 Compensation:
Officer 5 Name:
Officer 5 Compensation:

Attachment 4

Reporting and Prior Approval Terms

Subrecipient agrees to submit the following reports (PTE contacts are identified in Attachment 3A):

Technical Re

Monthly technical/progress reports will be submitted to the PTE's of the end of the month.	within	days of
Quarterly technical/progress reports will be submitted within 30 days after the end of each the PTE's	h project qua	rter to

Annual technical / progress reports will be submitted within days prior to the end of each budget period to the PTE's . Such report shall also include a detailed budget for the next Budget Period, updated other support for key personnel, certification of appropriate education in the conduct of human subject research of any new key personnel, and annual IRB or IACUC approval, if applicable.

A Final technical/progress report will be submitted to the PTE's within days of the end of the Project Period or after termination of this award, whichever comes first.

Technical/progress reports on the project as may be required by PTE's in order for the PTE to satisfy its reporting obligations to the Federal Awarding Agency.

Prior Approvals:

Carryover:

Other Reports:

In accordance with 37 CFR 401.14, Subrecipient agrees to notify both the Federal Awarding Agency via iEdison and PTE's within 60 days after Subrecipient's inventor discloses invention(s) in writing to Subrecipient's personnel responsible for patent matters. The Subrecipient will submit a final invention report using Federal Awarding Agency specific forms to the PTE's within 60 days of the end of the Project Period to be included as part of the PTE's final invention report to the Federal Awarding Agency.

A negative report is required:

Property Inventory Report (only when required by Federal Awarding Agency), specific requirements below.

Additional Technical and Reporting Requirements:

Attachment 5

Statement of Work, Cost Sharing, Indirects & Budget

Statement of Work

Below Attached, pages
If award is FFATA eligible and SOW exceeds 4000 characters, include a *Subrecipient Federal Award Project Description*

Budget Information

Indirect Information Indirect Cost Rate (IDC) Applied %	Cost Sharing
Rate Type:	If Yes, include Amount: \$

Budget Details Below Attached, pages

Budget Totals

Direct Costs \$

Indirect Costs \$

Total Costs \$

All amounts are in United States Dollars

Developing a Non-Lethal Aging Technique for Pacific Halibut: IPHC Scope of Work

The overarching goal of this proposal is to develop a genetic method for estimating the chronological age of Pacific halibut using fin tissue, a sample that can be obtained easily from live or dead individuals in a non-invasive manner. This method is based on the identification of DNA methylation patterns that are associated with age through the construction of a robust age estimation model for Pacific halibut. Although the proposed method represents an alternative aging method to traditional aging methods (otolith or scale aging) and not a replacement, it will have an impact in stock assessment as it will increase the number of aged individuals used for estimating the age structure of the Pacific halibut population since fin clips can be collected with little training and in areas not covered by IPHC field staff collecting otoliths. Furthermore, the proposed method is non-lethal and will provide age information to research projects and applications involving live Pacific halibut; such as migration and discard survival (including bycatch by non-directed fisheries) studies using tags or image recognition, captive studies, etc.; representing a novel approach to relate age and specific life history characteristics in live fish.

The specific objectives of this 2-year project are the following:

- 1. To identify DNA methylation signals in Pacific halibut fin tissue. Year 1.
- 2. To develop an age prediction model based on DNA methylation patterns: an epigenetic clock for Pacific halibut. Years 1 and 2.
- 3. To develop a targeted DNA methylation assay for larger scale age estimations. Year 2.

An APU graduate student (starting Spring 2025) will participate in all components of the proposed work. Specifically, the graduate student will be involved in DNA processing and library construction at the IPHC genetics laboratory, in bioinformatic processing of bisulfite sequencing data and age prediction model development at IPHC and APU, and in the development of a multiplex PCR assay at the AFSC-NOAA genetics laboratory.

Specific tasks to be undertaken by IPHC staff are the following:

- 1. All laboratory procedures including, but not limited to DNA processing and library construction
- 2. Bioinformatic analysis
- 3. Co-development (with APU faculty) of an age prediction model
- 4. Graduate student training for tasks 1-3
- 5. Co-authorship of conference presentations and peer-reviewed papers resulting from any part of the proposed work
- 6. Graduate student co-mentorship

		Requested			In-kind			Total		
Partner	Concept	Year 1	Year 2	Year1+2	Year 1	Year 2	Year1+2	Year 1	Year 2	Year1+2
IPHC										_
	Salary	4357.00	8975.42	13332.42	17429.00	17950.84	35379.84	21786.00	26926.26	48712.26
	Benefits	1450.02	2979.84	4429.86	5728.78	5839.63	11568.41	7178.80	8819.47	15998.27
	Equipment	0.00	0.00	0.00	28600.00	0.00	0.00			
	Supplies	21809.00	0.00	21809.00	0.00	0.00	0.00			
	Travel	2881.00	2881.00	5762.00	0.00	0.00	0.00			
	Publication	0.00	0.00	0.00	0.00	0.00	0.00			
	Other	7750.50	1801.50	9552.00	0.00	0.00	0.00			
	Total direct	38247.52	16637.76	54885.28	51757.78	23790.47	75548.25	90005.30	40428.23	130433.53
	Indirect	3824.75	1663.78	5488.53	0.00	0.00	0.00	3824.75	1663.78	5488.53
	Total costs	42072.27	18301.54	60373.81	51757.78	23790.47	75548.25	93830.05	42092.01	135922.06

Attachment 6

Notice of Award (NOA) and any additional documents

The following pages include the NOA and if applicable any additional documentation referenced throughout this Subaward.

Not incorporating the NOA or any additional documentation to this Subaward.

FDP Cost Reimbursement Subaward							
Federal Awarding Agency: Other [Type in Agency]			National Oceanic Atmospheric Administration (NOAA)				
Pass-Through Entity (PTE):			Subrecipient:				
University of Alaska Fairbanks			Ala	ska Pacific Un	iversity		
PTE PI:	Ginny Eckert		Sub PI:	Nathan Wolf			
PTE Fe	deral Award No: NA24OAR	X417C0027	Subaw	ard No: UAF 25-0003			
Project	Title: R/2024-05 Developn	nent of a Non-Lethal (Genetio	:-Based Method for Agin	g Pacific Halibut		
	<u>rd Budget Period:</u> 02/01/2024 End	: 01/31/2025	Amount	Funded This Action (USD): \$ 50),868.00		
	ed <u>Period of Performa</u> nce: 02/01/2024 End	: 01/31/2026	Increme	entally Estimated Total (USD): \$	93,904.00		
1.	and budget for this Subaward a independent entity and not an e	re as shown in Attachment 5 employee or agent of PTE.	ermined to 5. In its po	by 2 CFR 200.331), to Subrecipie erformance of Subaward work, S	Subrecipient shall be an		
	Subrecipient shall submit invoices not more often than monthly and not less frequently than quarterly for allowable costs incurred. Upon the receipt of proper invoices, the PTE agrees to process payments in accordance with this Subaward and 2 CFR 200.305. All invoices shall be submitted using Subrecipient's standard invoice, but at a minimum shall include current and cumulative costs (including cost sharing), breakdown by major cost category, Subaward number, and certification, as required in 2 CFR 200.415(a). Invoices that do not reference PTE Subaward number shall be returned to Subrecipient. Invoices and questions concerning invoice receipt or payments shall be directed to the party's Financial Contact, shown in Attachment 3A.						
3.		ntact, as shown in Attachme	nt 3A, no	, marked "FINAL" must be subm t later than 60 days after the fina cial report.			
4.	All payments shall be considered adjustment is necessary as a re			stment within the total estimated st the Subrecipient.	cost in the event such		
5.	Matters concerning the technica as shown in Attachments 3A an			be directed to the appropriate pass shown in Attachment 4.	arty's Principal Investigator		
6.	any changes requiring prior app	proval, shall be directed to the ntact shown in Attachments (e PTE's 3A and 3	3. Any such change made to this	tact and the Subrecipient's		
7.	The PTE may issue non-substa modification shall be considered Subrecipient's Authorized Office	<u>d valid 14 </u> days after receipt i	unless ot	herwise indicated by Subrecipier	. Unilateral nt when sent to		
8.	Each party shall be responsible or directors, to the extent allowed		ssions ar	d the negligent acts or omission	s of its employees, officers,		
9.	Either party may terminate this Subaward with 30 days written notice. Notwithstanding, if the Awarding Agency terminates the Federal Award, PTE will terminate in accordance with Awarding Agency requirements. PTE notice shall be directed to the Authorized Official Contact, and Subrecipient notice shall be directed to the Authorized Official Contact as shown in Attachments 3A and 3B. PTE shall pay Subrecipient for termination costs as allowable under Uniform Guidance, 2 CFR 200, or 45 CFR Part 75 Appendix IX, as applicable						
10.	10. By signing this Subaward, including the attachments hereto which are hereby incorporated by reference, Subrecipient certifies that it will perform the Statement of Work in accordance with the terms and conditions of this Subaward and the applicable terms of the Federal Award, including the appropriate Research Terms and Conditions ("RTCs") of the Federal Awarding Agency, as referenced in Attachment 2. The parties further agree that they intend this subaward to comply with all applicable laws, regulations, and requirements.						
By an A	outhorized Official of the PTE:		By an A	Authorized Official of the Subreci	pient:		
Kimberly Cox August 16,			2024	Hutonthelock	08/14/2024		
Name:	Kīm⁴℃ox	Date	Name:	Hilton Hallock	Date		
Title:	Director, OGCA		Title:	Provost			

Attachment 1 Certifications and Assurances

Subaward Number:

UAF 25-0003

Certification Regarding Lobbying (2 CFR 200.450)

By signing this Subaward, the Subrecipient Authorized Official certifies, to the best of his/her knowledge and belief, that no Federal appropriated funds have been paid or will be paid, by or on behalf of the Subrecipient, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement in accordance with 2 CFR 200.450.

If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or intending to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the Subrecipient shall complete and submit Standard Form -LLL, "Disclosure Form to Report Lobbying," to the PTE.

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Program for Enhancement of Contractor Employee Protections (41 U.S.C 4712)

Subrecipient is hereby notified that they are required to: inform their employees working on any federal award that they are subject to the whistleblower rights and remedies of the program; inform their employees in writing of employee whistleblower protections under 41 U.S.C §4712 in the predominant native language of the workforce; and include such requirements in any agreement made with a subcontractor or subgrantee.

The Subrecipient shall require that the language of the certifications above in this Attachment 1 be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

Use of Name

Neither party shall use the other party's name, trademarks, or other logos in any publicity, advertising, or news release without the prior written approval of an authorized representative of that party. The parties agree that each party may use factual information regarding the existence and purpose of the relationship that is the subject of this Subaward for legitimate business purposes, to satisfy any reporting and funding obligations, or as required by applicable law or regulation without written permission from the other party. In any such statement, the relationship of the parties shall be accurately and appropriately described.

Prohibition on Certain Telecommunication and Video Surveillance Services or Equipment

Pursuant to 2 CFR 200.216, Subrecipient will not obligate or expend funds received under this Subaward to: (1) procure or obtain; (2) extend or renew a contract to procure or obtain; or (3) enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services (as described in Public Law 115-232, section 889) as a substantial or essential component of any system, or as a critical technology as part of any system.

Attachment 2

Federal Award Terms and Conditions

Subaward Number

UAF 25-0003

Required Data Elements	Awarding Agency I	Awarding Agency Institute (If Applicable)			
The data elements required by Uniform	National Oceanic Atmospheric Administration (NOAA)				
Guidance are incorporated in the attached Federal Award.	Federal Award Issue Date	FAIN	Assistance Listing No.		
' -			11.417		
This Subaward Is:	Assistance Listing	g Program	Title (ALPT)		
Research & Development Subject to FFATA					
Research & Development		onnel Per I	NOA		
	Ginny Eckert				
General Terms and Conditions					
By signing this Subaward, Subrecipient agrees to the following:					
 To abide by the conditions on activities and restrictions on expenditure to this Subaward to the extent those restrictions are pertinent. This incl Agency's website: 					
https://www.nsf.gov/awards/managing/rtc.jsp					
2. 2 CFR 200			_		
The Federal Awarding Agency's grants policy guidance, including added performance or as amended found at:	enda in effect as of the beginning	g date of the	e period of		
https://www.nsf.gov/awards/managing/rtc.jsp					
4. Applicable Research Terms and Conditions, including any Federal Awa	arding Agency's Specific Require	ements four	nd at:		
https://www.nsf.gov/awards/managing/rtc.jsp		e	xcept for the following:		
a. No-cost extensions require the written approval of the PTE. Any req Administrative					
Conditions and Agency-Specific Requirements are replaced with Te c. Any prior approvals are to be sought from the PTE and not the Fede d. Title to equipment as defined in 2 CFR 200.1 that is purchased or fa funds, as direct costs of the project or program, shall vest in the Sub e. Prior approval must be sought for a change in Subrecipient PI or ch 5. Treatment of program income:	eral Awarding Agency. Abricated with research funds or orecipient subject to the condition	Subrecipier	nt cost sharing I in 2 CFR 200.313.		
Special Terms and Conditions:					
Data Sharing and Access: Subrecipient agrees to comply with the Federal Awarding Agency's data or the Federal Awarding Agency's standard terms and conditions as reference. No additional requirements	sharing and/or access requiremerenced in General Terms and C	nents as refl Conditions 1-	ected in the NOA -4 above.		
Data Rights: Subrecipient grants to PTE the right to use data created in the performant extent required to meet PTE's obligations to the Federal Government un	nce of this Subaward solely for t der its PTE Federal Award.	he purpose	of and only to the		
Copyrights:					
Subrecipient Grants to PTE an irrevocable, royalty-free, non-tra reproduce, make derivative works, display, and perform publicly any cop software and its documentation and/or databases) first developed and do only to the extent required to meet PTE's obligations to the Federal Gove	yrights or copyrighted material (elivered under this Subaward so	including ar lely for the p	ny computer		
Subrecipient grants to PTE the right to use any written progress reports a purpose of and only to the extent required to meet PTE's obligations to the	and deliverables created under the Federal Government under it	this Subawa s Federal A	ard solely for the ward.		
Promoting Objectivity in Research (COI): Subrecipient must designate herein which entity's Financial Conflicts of I					
If applying its own COI policy, by execution of this Subaward, Subrecipie the relevant Federal Awarding Agency as identified herein: National Occ	nt certifies that its policy complice anic Atmospheric Administration	es with the r	equirements of		
Subrecipient shall report any financial conflict of interest to PTE's Admini Attachment 3A. Any financial conflicts of interest identified shall, when a Agency. Such report shall be made before expenditure of funds authoriz identified COI.	pplicable, subsequently be repo	rted to Fede	eral Awarding		

Work Involving Human or Vertebrate Animals (Select Applicable Options)
No Human or Vertebrate Animals
This section left intentionally blank.
This section left intentionally blank.
Human Subjects Data (Select One) Not Applicable
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,
This section left intentionally blank
Additional Terms

Attachment 3A

Pass-Through Entity (PTE) Contacts

Sub	awai	rd N	um	her:
Oub	avvai	\mathbf{u}	ulli	ou.

UAF 25-0003

PTE Information										
Entity Name:	Universit	ty of Alaska Fair	banks							
Legal Address:	University of Alaska Fairbanks 2145 North Tanana Loop 008 West Ridge Research Building Fairbanks, AK 99775-7880									
Website:	www.uaf	edu/ogca/								
PTE Contacts										
Central Emai	l:	uaf-ogca@alas	ska.edu							
Principal Investig	ator Name:	Ginny Eckert								
Email:	gleckert(@alaska.edu		Telephone Number:	907-796-5450					
Administrative Co	ntact Name	Mandy Toong								
Email:	mstoong	@alaska.edu		Telephone Number:	907-474-5453					
COI Contact emai	il (if differer	it to above):	uaf-ori@alasl	ka.edu						
Financial Contact	Name:	Mandy Toong								
Email:	mstoong	@alaska.edu		Telephone Number:	907-474-5453					
Email invoices?	Yes 🔘	No Invoice emai	l (if different): ua	ıf-ofa-ap@alaska.e	edu					
Authorized Officia	l Name:	Kim Cox								
Email:	uaf-ogca	@alaska.edu		Telephone Number:	907-474-7301					
PI Address:										
			versity of Alasl 101 Point Lena Juneau, AK	Loop Road						
Administrative A	ddress:									
			Signers' Busin PO Box 75 Fairbanks, A	57580						
Invoice Address:										
		Un	iversity of Alas Accounts P	ayable						

Fairbanks, AK 99775-7920

Attachment 3B

Subaward Number:

UAF 25-0003 **Subrecipient Contacts** Subrecipient Information for FFATA reporting Entity's UEI Name: Alaska Pacific University Institution Type: Private Institution of Higher Education EIN No.: |92-0023588 Currently registered in SAM.gov: Yes UEI: GMQQTDPMJJA7 Exempt from reporting executive compensation: () Yes No (if no, complete 3Bpg2) Parent UEI: This section for U.S. Entities: Zip Code Look-up Zip Code+4: 99508-4625 Congressional District: AK-001 Place of Performance Address Alaska Pacific University 4101 University Drive Anchorage, AK 99508-4625 **Subrecipient Contacts** Central Email: Website: www.alaskapacific.edu Principal Investigator Name: Nathan Wolf nwolf@alaskapacific.edu Telephone Number: 907-564-8207 Email: Administrative Contact Name: Sami Glascott sglascott@alaskapacific.edu Telephone Number: 907-564-8884 Email: Financial Contact Name: Brenda Fahlsing Email: grantaccountant@alaskapacific.edu Telephone Number: 907-564-8307 Invoice Email: Authorized Official Name: Hilton Hallock Email: hhallock@alaskapacific.edu Telephone Number: 907-564-8358 Legal Address: Alaska Pacific University 4101 University Drive Anchorage, AK 99508-4625 Administrative Address: Alaska Pacific University 4101 University Drive Anchorage, AK 99508-4625 **Payment Address:**

> Alaska Pacific University 4101 University Drive

Officer 5 Compensation:

Attachment 3B-2

Highest Compensated Officers

Subaward Number: UAF 25-0003

Subrecipient:	
Institution Name:	Alaska Pacific University
PI Name:	Nathan Wolf
Highest Comp	pensated Officers
the entity in the Federal awards not have access periodic reports	total compensation of the five most highly compensated officers of the entity(ies) must be listed if a preceding fiscal year received 80 percent or more of its annual gross revenues in an \$25,000,000 or more in annual gross revenues from Federal awards; and the public does to this information about the compensation of the senior executives of the entity through filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. §§ or section 6104 of the Internal Revenue Code of 1986. See FFATA § 2(b)(1) Internal Revenue
Officer 1 Name:	
Officer 1 Compens	sation:
Officer 2 Name:	
Officer 2 Compens	sation:
Officer 3 Name:	
Officer 3 Compens	sation:
Officer 4 Name:	
omoor rivamo.	
Officer 4 Compens	sation:
Officer 5 Name:	

Attachment 4 Reporting and Prior Approval Terms

Subaward Number:

UAF 25-0003

Subrecipient agrees to submit the following reports (PTE contacts are identified in Attachment 3A):

Technical Reports:
Monthly technical/progress reports will be submitted to the PTE's Administrative Contact within 15 days of of the end of the month.
Quarterly technical/progress reports will be submitted within 30 days after the end of each project quarter to the PTE's Administrative Contact.
Annual technical / progress reports will be submitted within 30 days prior to the end of each budget period to the PTE's Administrative Contact. Such report shall also include a detailed budget for the next Budget Period, updated other support for key personnel, certification of appropriate education in the conduct of human subject research of any new key personnel, and annual IRB or IACUC approval, if applicable.
A Final technical/progress report will be submitted to the PTE's Administrative Contact within 90 days of the end of the Project Period or after termination of this award, whichever comes first.
Technical/progress reports on the project as may be required by PTE's Administrative Contact in order for the PTE to satisfy its reporting obligations to the Federal Awarding Agency.
Prior Approvals:
Carryover: Carryover is automatic
Other Reports: In accordance with 37 CFR 401.14, Subrecipient agrees to notify both the Federal Awarding Agency via designated porta and PTE's Administrative Contact within 60 days after Subrecipient's inventor discloses invention(s) in writing to Subrecipient's personnel responsible for patent matters. The Subrecipient will submit a final invention report using Federal Awarding Agency specific forms to the PTE's Administrative Contact within 60 days of the end of the Project Period to be included as part of the PTE's final invention report to the Federal Awarding Agency. A negative report is required: Property Inventory Report (only when required by Federal Awarding Agency), specific requirements below. Additional cost sharing requirements included below: Additional Technical and Reporting Requirements:
Frequency: Performance reports are due on a semi-annual basis unless otherwise specified in a specific award condition, no later than 30 days following the end of each six (6) month period from the start date of the original award. The last semi-annual performance report is required. The final report, which summarizes activities conducted during the entire award, must be submitted within 120 days following the period of performance end date. Subrecipients must submit final reports to the pass-through entity, no later than 90 days after the period of performance end date

Attachment 5 Statement of Work, Cost Sharing, Indirects & Budget

Subaward Number: UAF 25-0003

Statement of Work

Below A If award is FFATA eligible and SOW exceeds 4000 characte	ers, include a <i>Subi</i>	ges recipient Federal Award Project Description
		· · · · · · · · · · · · · · · · · · ·
В	Budget Inform	ation
Indirect Information Indirect Cost Rate (IDC) Applied	42 %	Cost Sharing Yes
Rate Type: Modified Total Direct Costs		If Yes, include Amount: \$ 32,909.00
	23 pages	
	23 pages	
	23 pages	
	23 pages	If Yes, include Amount: \$ 32,909.00
	23 pages	If Yes, include Amount: \$ 32,909.00 Budget Totals
	23 pages	If Yes, include Amount: \$ 32,909.00 Budget Totals Direct Costs \$ 48,267.00
	23 pages	If Yes, include Amount: \$ 32,909.00 Budget Totals Direct Costs \$ 48,267.00 Indirect Costs \$ 2,601.00
	23 pages	Budget Totals Direct Costs \$ 48,267.00 Indirect Costs \$ 2,601.00 Total Costs \$ 50,868.00
	23 pages	Budget Totals Direct Costs \$ 48,267.00 Indirect Costs \$ 2,601.00 Total Costs \$ 50,868.00
	23 pages	Budget Totals Direct Costs \$ 48,267.00 Indirect Costs \$ 2,601.00 Total Costs \$ 50,868.00

Subaward Number: UAF 25-0003

Attachment 6

Notice of Award (NOA) and any additional documents

\odot	The following pages include the NOA and if applicable any additional documentation referenced throughout this Subaward.
0	Not incorporating the NOA or any additional documentation to this Subaward.

Statement of Work: Development of a non-lethal genetic-based method for aging Pacific halibut

Robust methods to estimate the ages of commercially exploited fish species are critical for reliable stock assessment. Further, when combined with data on other biological characteristics, such as length/weight, maturity, movement, and distribution, the age distribution or age structure of a fish population provides essential information on population dynamics related to age, predicted reproductive status, life history stage, etc. For many managed groundfish species, such as Pacific halibut, age has been traditionally estimated by manually counting the number of annuli or concentric lamellae present in sagittal otoliths under a compound microscope. Although these otolith-based methods for aging Pacific halibut are accurate, they have several shortcomings. First, they cannot be used in fish that are not sacrificed, given that the otolith is a terminal (i.e., lethal) sample. Second, otolith-based aging techniques require considerable manual processing and analysis of stored otoliths by trained personnel (i.e., age readers) that have been increasingly difficult to recruit and maintain. Third, otolith-based aging methods cannot be automated in a highthroughput manner to improve processing time and efficiency and to reduce potential human error and overall cost. Given these challenges, alternative methods to microscopic age estimations are being developed and applied in fisheries. This project proposes developing a non-lethal genomic DNA methylation (DNAm) age estimation method for Pacific halibut based on the generation of a high-resolution DNA methylation map and leveraging both the recently sequenced Pacific halibut genome and the IPHC's extensive known-age genetic sample collection.

Specific project objectives will include 1) identifying DNA methylation signals in Pacific halibut fin tissue, 2) developing an age prediction model based on DNA methylation patterns: an epigenetic clock for Pacific halibut, and 3) developing a targeted DNA methylation assay for larger scale age estimations. Corresponding proposed deliverables will include 1) a reduced representation genome-wide map of DNA methylation at single base-pair resolution for Pacific halibut fin tissue, 2) an age predicting model for Pacific halibut using fin tissue and information on potential functional significance for model-selected age markers, and 3) a cost-effective, high-throughput multiplex PCR assay for age estimations for Pacific halibut.

Additionally, this project will support an MS student. The student will be jointly supervised by Dr. Nathan Wolf at Alaska Pacific University (APU) and by Dr. Josep Planas at the IPHC (also affiliate faculty at APU). Further, this project will promote the engagement of Alaskan coastal communities in improving our understanding of the age structure of harvested Pacific halibut through their participation in the collection and archiving of genetic samples (i.e., fin clips) for the developed aging method. A genetic sample collection kit will be produced, and Alaskan native coastal communities utilizing the Pacific halibut resource (e.g., St. Paul Is., St. Lawrence Is., Nome, etc.), as well as coastal communities with recreational fishing, will be invited to participate in genetic sample collections. For those communities that express interest, a brief Zoom presentation by project PIs will be given to describe the importance and objectives of the project and to review the protocol for sample collection, drying and storage. Upon completion of the project, each participating coastal community will receive a written report on the results and will be invited to a Zoom presentation by project PIs describing the process involved in data generation from the samples provided.

PROJECT TITLE: PI: START: END: DEPT #:	Development of a non-le Nathan Wolf 2/1/2024 1/31/2026 ASG 23-489	ethal genetic-based me	TOTAL REQUI	EST BUDGET TCH BUDGET	\$66,452 \$160,356	-	APU Request	\$33,530		IPHC Reque	st \$60,37	74	APU	Match \$19,	503		IPHC Match	\$46,949			
BANNER S/G #:	N/A					FY23	FY24	END	FY23	FY24	END	FY23	FY24			Y23	FY24	END			
						2/1/2024	2/1/2025 APU Request	1/31/2026	2/1/2024	2/1/2025 IPHC Request	1/31/2026	2/1/2024	2/1/20: APU Matcl		16 2/1/	/2024	2/1/2025 IPHC Match	1/31/2026	Total	Project Bu	udget
						Year 1	Year 2	APU	Year 1	Year 2	IPHC	Year 1	Year	2		ar 1	Year 2			,	-5
								Request			Request			APU Mat				IPHC Match	Year 1	Year 2	Total
SALARIES AND WAGES						Hours	Hours	Total	Hours	Hours	Total	Hours	Hours	Total	Hours		Hours	Total			Project
Senior Personnel Total Number of Hours 0.00 0.00	Employee Name Nathan Wolf Joseph Planas					0.0 \$2,243 0.0 \$0	0.0 \$0	\$6,729 \$0	0.0 \$4,35	57 0.0 \$8,9	5 \$13,33	60 0.0 \$8, 32 0.0	\$0 0.0	\$8,972 \$17 , \$0 \$8,972 \$17.	\$0 0.0	\$17,429	0.0 \$17,951	\$35,379		\$13,458 \$26,926 \$40,384	\$48,712
					Total Senior Personne ALARIES AND WAGES			\$6,729 \$6,729						\$8,972 \$17, \$8,972 \$17,		\$17,429 \$17,429	\$17,951 \$17,951	\$35,380 \$35,380	\$33,001		\$73,385
FRINGE BENEFITS										1.0	,						, , , , ,	,			
Senior Personnel	Nathan Wolf Joseph Planas					\$195 \$0		\$585 \$0	\$1,45	50 \$2,9i	50 \$4,43		779 \$0	\$780 \$1 ,	559 \$0	\$0 \$5,729	\$0 \$5,840	\$0 \$11,569	\$974 \$7,179	\$1,170 \$8,820	\$2,144 \$15,999
	ooopii i iaiab				Total Senior Personne	1 \$195	\$390	\$585	\$1,45	50 \$2,9	\$4,43	so \$	779	\$780 \$1,	559	\$5,729	\$5,840	\$11,569	\$8,153	\$9,990	\$18,143
					AL FRINGE BENEFIT: ARIES AND BENEFIT:			\$585 \$7,314					779	\$780 \$1, \$9,752 \$19,		\$5,729 \$23,158	\$5,840 \$23,791	\$11,569 \$46,949			\$18,143 \$91,528
				TOTAL SAL	ARIES AND BENEFIT	\$2,430	\$4,070	\$7,514	\$5,00	J/ \$11,5:	917,70	, ş5,	731	\$5,752 \$15,	303	\$23,130	\$23,731	\$40,545	\$41,154	450,574	\$31,520
APU Request Travel		Number of Trips			Item Yearly																
1. Domestic Travel	Description	Year 1 Year 2	Purpose	Travelers	Item Yearly Cost Increase																
Airfare	Anchorage to Seattle	1 3		1	500	1 \$500		\$2,000											\$500		\$2,000
Lodging Meals & Incidental Expenses		1 3	Collaboration	1	464 222	1 \$464 1 \$222	\$1,392 \$666	\$1,856 \$888											\$464 \$222	\$1,392 \$666	\$1,856 \$888
Ground Transportation	•	1 3		1	120	1 \$120	\$360	\$480											\$120	\$360	\$480
Airfare	Anchorage to Juneau	1		1	500	1 \$0		\$500											\$0	\$500	\$500
Lodging Meals & Incidental Expenses		1	Collaboration	1	498 285	1 \$0 1 \$0		\$498 \$285											\$0 \$0	\$498 \$285	\$498 \$285
Ground Transportation		i		1	80	1 \$0	\$80	\$80											\$0	\$80	\$80
Airfare	Anchorage to Seattle	1		1	1000 928	1 \$0 1 \$0		\$1,000 \$928											\$0	\$1,000 \$928	\$1,000 \$928
Lodging Meals & Incidental Expenses	.	1	Grad Student Conference	1	444	1 80	\$444	\$928 \$444											\$0 \$0	\$928 \$444	\$928 \$444
Ground Transportation		1		1	240	1 \$0	\$240	\$240											\$0	\$240	\$240
					Total Domestic Trave	\$1,306	\$7,893	\$9,199											\$1,306	\$7,893	\$9,199
		Number of Trips				1															
IPHC Request Travel		Number of Trips																			
		_			Item Yearly																
1. Domestic Travel Airfare	Description	Year 1 Year 2	Purpose	Travelers	Cost Increase 500	1			\$1,00	00 \$1,00	\$2,00	10							\$1,000	\$1,000	\$2,000
Lodging	Seattle to Anchorage	2 2	Collaboration	1	458	1			\$91	16 \$9	6 \$1,83	32							\$916	\$916	\$1,832
Meals & Incidental Expenses	3	2 2	and Project Meetings	1	362.5	1			\$72	25 \$7:	\$1,45								\$725	\$725 \$240	\$1,450
Ground Transportation		2 2		1	120 Total Domestic Trave	1			\$24 \$2,88										\$240 \$2.881	\$2,881	\$480 \$5,762
					L DOMESTIC TRAVE	L \$1,306		\$9,199	\$2,88	\$2,8	\$5,76	52	\$0	\$0	\$0	\$0	\$0	\$0	\$4,187	\$10,774	
				T01	TAL FOREIGN TRAVE		\$0 \$7,893	\$0 \$9,199	\$2,88		\$0 \$ \$1 \$5,76		\$0 \$0	\$0 \$0	\$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$4.187	\$10,774	\$0 \$14,961
CONTRACTUAL SERVICES	S				TOTAL TRAVE	\$1,500	\$1,033		\$2,00	\$2,00	40,70			40	V O	40	40	•	44,101	\$10,114	
Select Contractual Cost from		Publications	Desistantian			\$0 \$350	\$4,000 \$350	\$4,000 \$700	9		50 \$	50	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0	\$0 \$350	\$4,000	\$4,000 \$700
Select Contractual Cost from Select Contractual Cost from		Student Conference I Genome Sequencing				\$330		\$700	\$5.94		50 \$5,94	19	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$5,949	\$350 \$0	\$5,949
Select Contractual Cost from	List	Cloud Computing				\$0		\$0	\$1,80				\$0	\$0	\$0	\$0	\$0	\$0	\$1,802	\$1,801	\$3,603
					r Contractual Service		\$4,350 \$4,350	\$4,700 \$4,700		51 \$1,80 51 \$1,80			\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$8,101 \$8,101		\$14,252 \$14,252
COMMODITIES				TOTAL CON	TOTAL OFFICE								7-	V.	-						
Select Commodity from List		Supplies			TOTAL COMMODITIES	\$2,100 \$ \$2,100		\$2,400 \$2,400			50 \$21,80 50 \$21,80		\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0		\$300 \$300	\$24,209 \$24,209
					TOTAL COMMODITIES										**						
A. MTDC (total costs subje						\$6,194		\$23,613	\$38,24	\$16,6	\$54,88	\$9,	751	\$9,752 \$19,	503	\$23,158	\$23,791	\$46,949			\$144,950
B. APU Request Facilities a	and Administration (F&A)			Sponsore	d Research 42.05	\$2,601	\$7,316	\$9,917											\$2,601	\$7,316	\$9,917
B. IPHC Request Facilities	and Administration (F&A)			Sponsore	d Research 10.05	/a			\$3,82	25 \$1,6	\$5,48	39							\$3,825	\$1,664	\$5,489
B. TOTAL Facilities and Ad	dministration (F&A) - All Dep	partments				\$2,601	\$7,316	\$9,917	\$3,82	25 \$1,6	\$5,48	39	\$0	\$0	\$0	\$0	\$0	\$0	\$6.426	\$8,980	\$15,406
C. Total Costs Exempt from						\$0		\$0	\$0,02		50 \$		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D. Total Direct Costs (A+C))					\$6,194	\$17,419	\$23,613	\$38,24	\$16,6	\$54,88	35 \$9,	751	\$9,752 \$19,	503	\$23,158	\$23,791	\$46,949	\$77,351	\$67,599	\$144,950
E. Total Sponsor Request	(R+D)					\$8,795	\$24,735	\$33,530	\$42,07	73 \$18,3	1 \$60,37	74 \$9,	751	\$9,752 \$19,	503	\$23,158	\$23,791	\$46 040	\$83 777	\$76 579	\$160,356
L Juli opolisoi reduesti	(5.5)					90,790	ψ <u>ε</u> ,133	400,000	φ-42,07	¥10,3	. 400,37	\$3,		\$15,		420,130	420,731	\$40,343	400,111	\$10,015	¥ 700,550

National Ocean	nic and Atmospheric Administration (NOAA)		Adapted	from OME Control No: 064	IS-0362 Exp 04/30/2024	Use buttons	below to add	or remove additional year												
Form 90-4 (Ad	apted)																			
Project Status:	New	Project	Number:	R/2024-05																
G Program:	AK			from	to	Use button	selow to add	or remove extra rows to Fr	inge and Other											
Project Title:	Development of a Non-Lethal Genetic-Based	Project	t Period:	2/1/2024	1/31/2026															
	Method for Aging Pacific																			
	Halibut																			
PI:	Ginny Eckert									,										
Institution:	University of Alaska Fairbanks	No. of	Months	YEAR 1 Sea Grant	Matching	No. of	Months	YEAR 2 Sea Grant	Matching	No. of	Months	YEAR 3 Sea Grant	Matching	No. of	Months	YEAR 4 Sea Grant	Matching	Months	TOTAL Sea Grant	Matching
		Personnel	of Effort	(Federal) Funds	Funds	Personne	of Effort	(Federal) Funds	Funds	Personne		(Federal) Funds			of Effort	(Federal) Funds	Funds	of Effort	(Federal) Funds	Funds
A. Salaries & V	Vares					1				1										
1) Senior Pe																				
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	ate (Faculty or Staff)					_	0.00												-	-
2) Other Per																				
a. Profess		0	0.00	-		0	0.00	_											-	-
	th Associates	-	0.00				0.00													
	th Associates th Asst. Grad Students																		-	-
	thool Students																		-	-
e. Pre-Bac																			-	-
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h. Misc.																			-	-
	ries &Wages (A1a-A2h)			-	-			-	-			-	-			-	-		-	-
3. Fringe Bene	fits																			
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Total Frin	ge Benefits		_	-		1		-	-	1		-	-	1		-	-		-	-
Total Salaries	& Fringe Benefits			-		1		-	-	1		-	-	1		-	-		-	-
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D. Expendable				-		1		-	_	1				1					-	
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2) Foreign				-	-	4		-	-	4				4					-	-
Total Trav				-		1		-	-	1		-	-	1		-	-		-	
	& Documentation Costs			-	<u> </u>	1		-	-					1					-	-
	- the examples provided can be changed					ı								ı						
1)	OTHER - Subaward to Alaska Pacific University			50,868	32,909	1		43,036	33,543					1					93,904	66,452
2)																			-	-
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4)										I									-	-
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Total Oth	er Costs	_		50,868	32,909	1		43,036	33,543	1		-	-	1		-	-		93,904	66,452
otal Direct Co				50,868	32,909	1		43,036	33,543	1		-	-	1		-			93,904	66,452
AODIFIED Dire	ect Costs - used for calculating indirect			25,000	-	1		-	-	1				1					25,000	
	ts - calculated from %*Modified Direct, but you c	an overwrit	e			1				1				1						
1) On:	Sponsored Research	55		13,750]		-				_	-]		-	-		13,750	-
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3) other:			%	-	-			-	-	4		-	-			-	-		-	-
otal Indirect				13,750	-	1		-	-	4		-	-	1		-	-		13,750	-
otal Cost - (To	otal Direct) + (Total Indirect)			64,618	32,909	1		43,036	33,543	1		-	-	1		-	-		107,654	66,452

	apted)											
Project Status:	New	Project	t Number:	R/2024-05								
SG Program:	AK			from	to	Use button b	elow to add o	or remove extra rows to F	ringe and Other			
Project Title:	Development of a Non-Lethal Genetic-Based Method for Aging Pacific Halibut	Proje	ct Period:	2/1/24	1/31/26							
PI:	Nathan Wolf			ı								
Institution:	Alaska Pacific University			YEAR 1				YEAR 2			TOTAL	
		No. of Personnel	Months of Effort	Sea Grant (Federal) Funds	Matching Funds	No. of Personne I	Months of Effort	Sea Grant (Federal) Funds	Matching Funds	Months of Effort	Sea Grant (Federal) Funds	Matching Fund
A. Salaries & W	Vages											
1) Senior Per	rsonnel											
a. (Co) Prir	ncipal Investigator(s)	1	1.25	2,243	8,972	1	1.50	4,486	8,972	2.75	6,729	17,94
b. Associat	ate (Faculty or Staff)										-	-
2) Other Pers	sonnel											
a. Profession		0	0.00	-	-	0	0.00	-	-		-	-
b. Research	th Associates										-	-
	h Asst. Grad Students										-	-
	hool Students										-	-
e. Pre-Bac											-	-
f. Secretar	rial-Clerical										-	-
g. Technica	al-Shop										-	-
h. Misc.											-	-
	ries &Wages (A1a-A2h)	1	1.25	2,243	8,972	1	1.50	4,486	8,972	#VALUE!	6,729	17,9
B. Fringe Bene	efits											
1) notes	Negotiated Fringe Benefits	8.69	%	195	779			390	780		585	1,5
2) notes			%								-	-
3) notes			%								-	-
Total Fringe	ge Benefits			195	779			390	780		585	1,5
Total Salaries &	& Fringe Benefits			2,438	9,751			4,876	9,752		7,314	19,5
C. Permanent E	Equipment			-	-			-	-		-	-
D. Expendable :	Supplies			2,100	-			300	-		2,400	-
E. Travel												
	U.S. (Inc. Puerto Rico)			1,306	-			7,893	-		9,199	-
2) Foreign	,			-	-			-	-		-	-
Total Trave	el			1,306	-			7,893	-		9,199	-
F. Publication &	& Documentation Costs			-	-			4,000	-		4,000	-
G. Other Costs	- the examples provided can be changed											
1)	OTHER - Subaward to International Pacific Halibut Commission			42,073	23,158			18,301	23,791		60,374	46,9
2)	OTHER - Conference Registration			350		I		350			700	-
3)						I					-	-
4)											-	-
5)						I					-	-
6)						I					-	-
7)						I					-	-
8)				-	-			-	- 22.704		-	-
Total Other				42,423	23,158	ł		18,651	23,791		61,074	46,9
Total Direct Cos				48,267	32,909	I		35,720	33,543		83,987	66,4
MODIFIED Dire	ect Costs - used for calculating indirect			6,194	-			17,419	-		23,613	-
	ts - calculated from %*Modified Direct, but you can overwr			2.504	_	I		7,316			9,917	
H. Indirect Cost	Caracara d Barrarach								_			
H. Indirect Cost 1) On:	Sponsored Research	42	%	2,601								
H. Indirect Cost 1) On: 2) Off:	Sponsored Research	42	%	-	-			-	-		-	-
H. Indirect Cost 1) On:		42							-			

Project Status:		Projec	t Number:	R/2024-05								
SG Program:	AK			from	to	use button t	perow to add o	or remove extra rows to Fi	nnge and Otner			
Project Title:	Development of a Non-Lethal Genetic-Based Method	Proje	ct Period:	2/1/24	1/31/26							
	for Aging Pacific Halibut											
PI:	Josep Planas											
Institution:	International Pacific Halibut Commission	No of	Months	YEAR 1		No. of Months		YEAR 2		Months	TOTAL	
		No. of Personnel		Sea Grant (Federal) Funds	Matching Funds	No. of Personne	of Effort	Sea Grant (Federal) Funds	Matching Funds	of Effort	Sea Grant (Federal) Funds	Matching Fund
				(rederal) rulius		1		(rederal) rulius			(reueral) rulius	
A. Salaries & W	Vages .											
1) Senior Per	rsonnel											
a. (Co) Prir	ncipal Investigator(s)	1	1.25	4,357	11,664	1	1.50	8,975	12,014	2.75	13,332	23,67
b. Associat	te (Faculty or Staff)										-	-
2) Other Pers	sonnel											
a. Profession		1	1.00	-	5,765	1	1.00	-	5,937	2.00	-	11,70
	h Associates										-	-
c. Research	h Asst. Grad Students										-	-
d. Prof. Sch	hool Students										-	-
e. Pre-Bac											-	-
f. Secretar	rial-Clerical										-	-
g. Technica	al-Shop										-	-
h. Misc.											-	-
	ies &Wages (A1a-A2h)	2	2.25	4,357	17,429	2	2.50	8,975	17,951	#VALUE!	13,332	35,380
B. Fringe Benef												
1) notes	Negotiated Fringe Benefits - Planas	33.2	%	1,450	3,873			2,980	3,869		4,430	7,742
2) notes	Negotiated Fringe Benefits - Jasonowicz	33.2	%		1,856				1,971		-	3,82
3) notes			%								-	-
Total Fringe				1,450	5,729			2,980	5,840		4,430	11,569
Total Salaries &	& Fringe Benefits			5,807	23,158			11,955	23,791		17,762	46,949
C. Permanent E	Equipment			-	-			-	-		-	-
D. Expendable	Supplies			21,809	-			-	-		21,809	-
E. Travel												
1) Domestic U	J.S. (Inc. Puerto Rico)			2,881	-			2,881	-		5,762	-
2) Foreign				-	-			-	-		-	-
Total Trave	el .			2,881	-			2,881	-		5,762	-
F. Publication &	Documentation Costs			-	-			-	-		-	-
G. Other Costs	- the examples provided can be changed											
1)	OTHER - Genome Sequencing			5,949	-			-	-		5,949	-
2)	OTHER - Cloud Computing			1,802				1,801			3,603	-
3)											-	-
4)											-	-
5)											-	-
6)											-	-
7)											-	-
8)				-	-			-	-		-	-
Total Other				7,751	-			1,801	-		9,552	-
Total Direct Cos				38,248	23,158			16,637	23,791		54,885	46,94
	ect Costs - used for calculating indirect			38,248	-			16,637	-		54,885	-
	ts - calculated from %*Modified Direct, but you can overwr											
1) On:	Sponsored Research	10	%	3,825	-			1,664	-		5,489	-
2) Off:			%	-	-			-	-		-	-
3) other: Total Indirect Co	rosts	l .	/0	3,825	_			1,664	_		5,489	_

R/2024-05 DEVELOPMENT OF A NON-LETHAL GENETIC-BASED METHOD FOR AGING PACIFIC HALIBUT REQUESTED FUNDS BUDGET NARRATIVE

Personnel

YEAR 1 PERSONNEL			Year 1 Total	\$ <u>0</u>
Position Title & Name	Yearly Salary	% of Time	No. of Months	\$Amount
Principal Investigator, Ginny Eckert	\$196,773	0%	0.00 mos.	\$0
YEAR 2 PERSONNEL			Year 2 Total	\$ <u>0</u>
Position Title & Name	Yearly Salary	% of Time	No. of Months	\$Amount
Principal Investigator, Ginny Eckert	\$201,693	0%	0.00 mos.	\$0
PROJECT TOTAL PERSONNEL			Project Total	\$ <u>0</u>

<u>Principal Investigator – Ginny Eckert:</u> This position will provide program planning and supervision. This position relates to all program objectives. No funding is requested in Years 1-4 for the time PI Eckert spends administering this project. PI Eckert's total project support is 0 hours (0.00 mos.) effort for a total project support of \$0.

Salaries above are listed at the FY24 rate and include a leave reserve of 20.6% for non-union faculty. Salaries also include a 2.5% annual inflation increase.

Fringe Benefits

YEAR 1 FRINGE BENEFITS			Year 1 Total	\$ <u>0</u>
Position Title & Name Principal Investigator, Ginny Eckert	Yearly Salary \$196,773	% Rate 25.1%	\$ Amount \$0	
YEAR 2 FRINGE BENEFITS			Year 2 Total	\$ <u>0</u>
Position Title & Name Principal Investigator, Ginny Eckert	Yearly Salary \$201,693	% Rate 25.1%	\$ Amount \$0	
PROJECT TOTAL FRINGE BENEFITS	8		Project Total	\$ <u>0</u>

Travel

YEAR 2 OTHER

Staff benefits are applied according to UAF's FY24 fixed fringe benefit rates at the rate of 25.1% for non-union faculty. A copy of the rate agreement is available at http://www.alaska.edu/cost-analysis/negotiation-agreements/

TRAVEL	Total	\$ <u>0</u>
Travel costs are not requested for this project.		
Equipment		
EQUIPMENT	Total	\$ <u>0</u>
Equipment costs are not requested for this project.		
Supplies		
SUPPLIES	Total	\$ <u>0</u>
Supplies costs are not requested for this project.		
Contractual		
CONTRACTUAL	Total	\$ <u>0</u>
Contractual costs are not requested for this project.		
Construction		
CONSTRUCTION	Total	\$ <u>0</u>
Construction costs are not requested for this project.		
Other		
YEAR 1 OTHER	Year 1 Total	\$ <u>64,618</u>
\$64,618 in Year 1 is requested for a subaward to Alaska Pacific University for Na and will work with co-PI, Josep Planas, on project coordination, administration, graduate student. This position is responsible for overseeing coordination with ensuring necessary reports/documentation are submitted to UAF Sea Grant. This	reporting and publication other agencies and	ation, and co-supervision of the is the responsible authority for

\$43,036 in Year 2 is requested for a subaward to Alaska Pacific University for Nathan Wolf to direct the overall operation of the project Budget Justification Attachmento-PI, Josep Planas, on project coordination and publication, and co-supervision of the

Year 2 Total

\$ <u>43,036</u>

graduate student. This position is responsible for overseeing coordination with other agencies and is the responsible authority for ensuring necessary reports/documentation are submitted to UAF Sea Grant. This position relates to all program objectives.

PROJECT TOTAL OTHER	Project Total	\$ <u>107,654</u>
---------------------	---------------	-------------------

Total Direct Charges

Total Biroot on	ai geo		
		Year 1 Total	\$ 50,868
		real i rotal	φ <u>30,808</u>
A. Personnel	\$0		
B. Fringe Benefits	\$0		
C. Travel	\$0		
D. Equipment	\$0		
E. Supplies	\$0		
F. Contractual	\$0		
G. Construction	\$0		
H. Other	\$50,86 <u>8</u>		
Year 1 Direct Costs	\$50,868		
		Year 2 Total	\$ <u>43,036</u>
A. Personnel	\$0		
B. Fringe Benefits	\$0		
C. Travel	\$0		
D. Equipment	\$0		
E. Supplies	\$0		
F. Contractual	\$0		
G. Construction	\$0		
H. Other	\$43,03 <u>6</u>		
Year 2 Direct Costs	\$43,036		
. 54 2 2551 55515	4 . 3,333		
		Project Total	\$ <u>93,904</u>
A. Personnel	\$0		
B. Fringe Benefits	\$0		
C. Travel	\$0		
D. Equipment	0.0		

B. Fringe Benefits	\$0
C. Travel	\$0
D. Equipment	\$0
E. Supplies	\$0
F. Contractual	\$0
G. Construction	\$0
H. Other	\$93,904
Project Total Direct Costs	\$93,904

Indirect Charges

YEAR 1 INDIRECT COSTS Year 1 Total \$ <u>13,750</u>

The predetermined rate is 55% and is computed on the following Year 1 Modified Total Direct Costs base \$25,000.

Personnel Fringe Travel

Supplies

Other **Total**

Multiplied by Indirect Cost Rate

55%

YEAR 2 INDIRECT COSTS

Year 2 Total

\$<u>0</u>

The predetermined rate is 55% and is computed on the following Year 2 Modified Total Direct Costs base \$0.

Personnel

Fringe

Travel

Supplies

Other

Total

Multiplied by Indirect Cost Rate

55%

PROJECT TOTAL INDIRECT COSTS

Project Total

\$ 13,750

The predetermined rate is 55% and is computed on the following Project Total Modified Total Direct Cost base \$25,000.

Personnel

Fringe

Travel

Supplies

Other Total

Multiplied by Indirect Cost Rate

55%

Facilities and Administrative (F&A) Costs are negotiated with the Office of Naval Research. The rate for sponsored research at UAF is calculated at 55.0% (FY23-FY26 predetermined agreement) of Modified Total Direct Costs (MTDC). MTDC includes Total Direct Costs minus tuition and associated fees, scholarships, participant support costs, rental/lease costs, subaward amounts over \$25,000, and equipment. A copy of the rate agreement is available at: http://www.alaska.edu/cost-analysis/negotiation-agreements/.

Total Indirect Costs \$13,750

Totals – Requested Funds Direct and Indirect Charges

Year 1 = \$64,618

Year 2 = \$43,036

Project Total = \$107,654

R/2024-05 DEVELOPMENT OF A NON-LETHAL GENETIC-BASED METHOD FOR AGING PACIFIC HALIBUT MATCHING FUNDS BUDGET NARRATIVE

Personnel

YEAR 1 PERSONNEL			Year 1 Total	\$ <u>0</u>
Position Title & Name	Yearly Salary	% of Time	No. of Months	\$Amount
Principal Investigator, Ginny Eckert	\$196,773	0%	0.00 mos.	\$0
YEAR 2 PERSONNEL			Year 2 Total	\$ <u>0</u>
Position Title & Name	Yearly Salary	% of Time	No. of Months	\$Amount
Principal Investigator, Ginny Eckert	\$201,693	0%	0.00 mos.	\$0
PROJECT TOTAL PERSONNEL			Project Total	\$ <u>0</u>

<u>Principal Investigator – Ginny Eckert:</u> This position will provide program planning and supervision. This position relates to all program objectives. No funding is requested in Years 1-2 for the time PI Eckert spends administering this project. PI Eckert's total project support is 0 hours (0.00 mos.) effort for a total project support of \$0.

Salaries above are listed at the FY24 rate and include a leave reserve of 20.6% for non-union faculty. Salaries also include a 2.5% annual inflation increase.

Fringe Benefits

YEAR 1 FRINGE BENEFITS			Year 1 Total	\$ <u>0</u>
Position Title & Name Principal Investigator, Ginny Eckert	Yearly Salary \$196,773	% Rate 25.1%	\$ Amount \$0	
YEAR 2 FRINGE BENEFITS			Year 2 Total	\$ <u>0</u>
Position Title & Name Principal Investigator, Ginny Eckert	Yearly Salary \$201,693	% Rate 25.1%	\$ Amount \$0	
PROJECT TOTAL FRINGE BENEFIT	S		Project Total	\$ <u>0</u>

Staff benefits are applied according to UAF's FY24 fixed fringe benefit rates. Rates are 25.1% for non-union faculty. A copy of the rate agreement is available at http://www.alaska.edu/cost-analysis/negotiation-agreements/.

Budget Justification Attachment

T	r	a	V	е	

TRAVEL Total \$ <u>0</u>

No matching funds will be provided for Travel costs.

Equipment

EQUIPMENT Total \$ <u>0</u>

No matching funds will be provided for Equipment costs.

Supplies

SUPPLIES Total \$ <u>0</u>

No matching funds will be provided for Supplies costs.

Contractual

CONTRACTUAL Total \$ <u>0</u>

No matching funds will be provided for Contractual costs.

Construction

CONSTRUCTION Total \$ <u>0</u>

No matching funds will be provided for Construction costs.

Other

OTHER Year 1 Total \$ <u>32,909</u>

Third Party Matching Funds in Year 1 will be provided by Alaska Pacific University for Nathan Wolf to direct the overall operation of the project and will work with co-PI, Josep Planas, on project coordination, administration, reporting and publication, and co-supervision of the graduate student. This position is responsible for overseeing coordination with other agencies and is the responsible authority for ensuring necessary reports/documentation are submitted to UAF Sea Grant.

OTHER

Year 2 Total \$ <u>32,909</u>

Third Party Matching Funds in Year 2 will be provided by Alaska Pacific University for Nathan Wolf to direct the overall operation of the project and will work with co-PI, Josep Planas, on project coordination, administration, reporting and publication, and co-supervision of the graduate student. This position is responsible for overseeing coordination with other agencies and is the responsible authority for ensuring necessary reports/documentation are submitted to UAF Sea Grant.

PROJECT TOTAL OTHER		F	Project Total	\$ <u>66,452</u>
Total Direct Char	ges			
		,	Year 1 Total	\$ <u>32,909</u>
A. Personnel	\$0		Teal T Total	Ψ <u>32,909</u>
B. Fringe Benefits	\$ 0			
C. Travel	\$0			
D. Equipment	\$0			
E. Supplies	\$0			
F. Contractual	\$0 \$0			
G. Construction H. <u>Other</u>	\$0 \$32,909			
Year 1 Direct Costs	\$32,909 \$32,909			
real i Direct Costs	Ф 32,909			
			Year 2 Total	\$ <u>33,543</u>
A. Personnel	\$0			
B. Fringe Benefits	\$0			
C. Travel	\$0			
D. Equipment	\$0			
E. Supplies F. Contractual	\$0 \$0			
G. Construction	\$0 \$0			
H. Other	\$33,54 <u>3</u>			
Year 2 Direct Costs	\$33,543			
	, , -			
		1	Project Total	\$ <u>66,452</u>
A. Personnel	\$0		•	·
B. Fringe Benefits	\$0			
C. Travel	\$0			
D. Equipment	\$0			
E. Supplies	\$0			
F. Contractual	\$0 \$0			
G. Construction H. Other	\$0 \$66,452			
Project Total Direct Costs	\$66,452			
Troject Total Birect Oosts	ψ00,402			
Indirect Charges				
Indirect Charges				
YEAR 1 INDIRECT COSTS			Year 1 Total	\$ <u>0</u>
				•
The predetermined rate is 5	5% and is computed	on the following Year 1 Modified ⁻	Total Direct Costs bas	e \$0.
Personnel				
Fringe				
Travel				
Supplies				
Other Total				
Multiplied by Indirect Cost F	Rate 55%			

YEAR 2 INDIRECT COSTS

Year 2 Total

Budget Justification Attachment

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\$<u>0</u>

The predetermined rate is 55% and is computed on the following Year 2 Modified Total Direct Costs base \$0.

Personnel

Fringe

Travel

Supplies

Other

Total

Multiplied by Indirect Cost Rate

Project Total

\$<u>0</u>

PROJECT TOTAL INDIRECT COSTS

The predetermined rate is 55% and is computed on the following Project Total Modified Total Direct Costs base \$0.

Personnel Fringe

Travel Supplies

Other

Total

Multiplied by Indirect Cost Rate

55%

55%

Facilities and Administrative (F&A) Costs are negotiated with the Office of Naval Research. The rate for sponsored research at UAF is calculated at 55.0% (FY23-FY26 predetermined agreement) of Modified Total Direct Costs (MTDC). MTDC includes Total Direct Costs minus tuition and associated fees, scholarships, participant support costs, rental/lease costs, subaward amounts over \$25,000, and equipment. A copy of the rate agreement is available at: http://www.alaska.edu/cost-analysis/negotiation-agreements/.

Total Indirect Costs

\$0

Totals – Matching Funds Direct and Indirect Charges

Year 1 = \$32,909

Year 2 = \$33,543

Project Total = \$66,452

ALASKA PACIFIC UNIVERSITY SUBAWARD

REQUESTED FUNDS BUDGET NARRATIVE

PERSONNEL

APU Total \$6,729

Position Title

& Name	Yearly Salary	% of Time	No. of Months	\$Amount
PI, Nathan Wolf	\$107,664	%6	0.75	\$6,729

<u>Principal Investigator – Nathan Wolf:</u> This position directs the overall operation of the project and will work with co-PI, Josep Planas, on project coordination, administration, reporting and publication, and co-supervision of the graduate student. This position is responsible for overseeing coordination with other agencies and is the responsible authority for ensuring necessary reports/documentation are submitted to UAF Sea Grant. This position relates to all program objectives. Nathan Wolf will provide a total of 0.25 months effort for \$2,243 in Year 1 and 0.5 months effort for \$4,486 in Year 2 for a total of 0.75 months effort at \$6,729.

IPHC Total \$13,332.42

Position Title

& Name	Yearly Salary	% of Time	No. of Months	\$Amount
Co-PI, Josep Planas	\$142,767	%6	0.75	\$8,922.96
Collaborator, Andy Jasonowicz	\$70,551	%6	0.75	\$4,409.46

<u>Co-Principal Investigator – Josep Planas</u>: This position assists in the overall operation of the project and will work with PI, Nathan Wolf, on project coordination, administration, reporting and publication, and co-supervision of the graduate student. This position is responsible for assisting the PI with agency coordination and submission of necessary reports/documentation to UAF Sea Grant. This position relates to all program objectives. Josep Planas will provide a total of 0.25 months effort for \$2,916 in Year 1 and 0.5 months effort for \$6,006.96 in Year 2 for a total of 0.75 months effort at \$8,922.96.

<u>Collaborator – Andrew Jasonowicz</u>: This position will be responsible for instructing and assisting the graduate student with the proposed library preparation and with sequencing and implementing the bioinformatic approach. This position will assist with training, documentation, and reporting and publication. Andrew Jasonowicz will provide a total of 0.25 months effort for \$1,441 in Year 1 and 0.5 months effort for \$2,968.46 for a total of 0.75 months at \$4,409.46.

AFSC Total \$0

Position Title

& Name	Yearly Salary	% of Time	No. of Months	\$Amount
Co-PI, Wes Larson	\$0	%0	0	\$0

<u>Co-Principal Investigator – Wes Larson:</u> This position will assist PI, Nathan Wolf, and co-PI, Josep Planas, on project coordination, publication, and co-supervision of the graduate student. This position will assist with the development of a high-throughput panel for Pacific halibut aging and will train the graduate student at the NOAA Auke Bay laboratory in this method. This position specifically relates to phase 3 of the project, and will also transfer this technology to the NOAA Alaska Fisheries Science Center. This position is not requesting any funding support from this project.

FRINGE BENEFITS

APU Total \$584.75

Position Title

& Name	Yearly Salary	% Rate	\$Amount
PI, Nathan Wolf	\$107,664	%8.69	\$584.75

The base fringe benefit rate for APU employees for years one and two is calculated at 8.69%, comprised of FICA, Medicare, and ESC (state unemployment tax). In Year 1, Nathan Wolf's requested salary of \$2,243 equates to a total of \$194.92 in fringe benefits. In Year 2, the requested salary of \$4,486 equates to a total of \$389.83 in fringe benefits, for a total of \$584.75.

IPHC Total \$4,426.36

Position Title

& Name	Yearly Salary	% Rate	\$Amount
Co-PI, Josep Planas	\$142,767	%33.2	\$2,962.42
Collaborator, Andy Jasonowicz	\$70,551	%33.2	\$1,463.94

The fringe benefit rate for full-time employees for years one and two is calculated at 33.2%. In Year 1, Josep Planas's requested salary of \$2,916 equates to \$968.11 in fringe benefits, and Andy Jasonowicz's salary of \$1,441 equates to \$478.41 in fringe benefits. In Year 2, Josep Planas's requested salary of \$6,006.96 equates to \$1,994.31 in fringe benefits, and Andy Jasonowicz's requested salary of \$2,968.46 equates to \$985.53 in fringe benefits.

AFSC Total \$0

Position Title

& Name	Yearly Salary	% Rate	\$Amount
Co-PI, Wes Larson	\$0	%0	\$0

The AFSC is not requesting any funding support for fringe benefits.

TRAVEL – DOMESTIC

APU Total \$9,199

Domestic Travel:

Year 1: \$1,306

Anchorage to Seattle (1 trip)

Roundtrip airfare Anchorage-Seattle (\$500/person) \$500 Hotel Seattle (\$232/night; 2 nights) \$464 Per diem Seattle (\$74/day; 3 days) \$222 Ground transportation (\$60/ride; roundtrip) \$120

Trip total: \$1,306

Justification: The graduate student will travel from Anchorage to Seattle for Year 1 project work with IPHC partners at the IPHC headquarters, and will use ground transportation from the airport to the hotel and IPHC building.

<u>Year 2:</u> \$7,893

Anchorage to Seattle (3 trips)

Airfare Anchorage-Seattle-Anchorage (\$500/person) \$1,500 Hotel Seattle (\$232/night; 2 nights) \$1,392 Per diem Seattle (\$74/day; 3 days) \$666 Taxi airport (\$60/ride; roundtrip) \$360

Trip total: \$3,918

Justification: The PI Nathan Wolf (1 trip) and graduate student (2 trips) will travel to the IPHC headquarters for Year 2 project work. They will both travel from Anchorage to Seattle and take ground transportation from the airport to the hotel and IPHC building.

Anchorage to Juneau (1 trip)

Airfare Anchorage-Juneau-Anchorage (\$500/person) \$500 Hotel Juneau (\$249/night; 2 nights) \$498 Per diem Juneau (\$95/day; 3 days) \$285 Taxi airport (\$40/ride; roundtrip) \$80

Trip total: \$1,363

Justification: The graduate student will travel from Anchorage to Juneau for project work with NOAA AFSC partners and will take ground transportation from the airport to the hotel and Auke Bay building.

Anchorage to Seattle (2 trips)

Airfare Anchorage-Seattle-Anchorage (\$500/person) \$1,000 Hotel Seattle (\$232/night; 2 nights) \$928 Per diem Seattle (\$74/day; 3 days) \$444 Taxi airport (\$60/ride; roundtrip) \$240

Trip total: \$2,612

Justification: The graduate student will travel from Anchorage to regional or national domestic conferences (2 trips). Conferences and locations are TBD, so costs for travel to Seattle are provided as estimates.

IPHC Total \$5,762

Domestic Travel:

Year 1: \$2,881.00

Seattle to Anchorage (2 trips)

Airfare Seattle-Anchorage-Seattle (\$500/person) \$500 Hotel Anchorage (\$229/night; 2 nights) \$458 Per diem Anchorage (\$145/day; 3 days) \$362.5 Taxi airport (\$60/ride; roundtrip) \$120

Trip total: \$1,440.50

Justification: The co-PI, Josep Planas, and collaborator, Andy Jasonowicz, will travel from Seattle to Anchorage for a Year 1 project meeting with partners at Alaska Pacific University, and will use ground transportation from the airport to the hotel and university.

Year 2: \$2,881.00

Seattle to Anchorage (2 trips)

Airfare Seattle-Anchorage-Seattle (\$500/person) \$500

Hotel Anchorage (\$229/night; 2 nights) \$458

Per diem Anchorage (\$145/day; 3 days) \$362.50

Taxi airport (\$60/ride; roundtrip) \$120

Trip total: \$1,440.50

Justification: The co-PI, Josep Planas, and project collaborator, Andy Jasonowicz, will travel from Seattle to Anchorage for Year 2 project meeting with partners. They will use ground transportation from the airport to the hotel and university.

Domestic Travel: AFSC does not request any funding support for travel.

EQUIPMENT

APU: \$0

IPHC: \$0

AFSC: \$0

SUPPLIES

APU Total: \$2,400

Year 1: \$2,100

Laptop for graduate student (\$1,800); postage and materials for engagement supplies and sample collection kits (\$300).

Year 2: \$300

Postage and materials for engagement supplies and sample collection kits.

IPHC Total: \$21,809

Year 1: \$21,809

General laboratory supplies \$2,500 Molecular biology materials \$19,309

Year 2: \$0

Supplies relate to items needed for processing and analyzing samples related to experiments contemplated in Tasks 2 and 3. General laboratory supplies include plastic consumables (\$1,500) and general chemicals and reagents (\$1,000). Molecular biology materials refer to Qiagen DNA purification kits ($$1,690/kit \times 1 \text{ kits} + tax = $1,859$), Agilent Bioanalyzer High Sensitivity DNA analyses ($$790/kit \times 3 \text{ kits} + tax = $2,600$), Zymo-Seq RRBS Library kits ($$2,250/kit/48 \text{ samples} \times 6 \text{ kits} + tax = $($14,850)$).

AFSC Total: \$0

AFSC does not request any funding support for supplies.

CONTRACTUAL

APU Total: \$4,000

<u>Year 1:</u> \$350

Conference registration fees for the graduate student to attend a regional/national domestic conference (TBD).

Year 2: \$4,350

One publication fee in an open-access peer-reviewed journal (TBD; \$4,000) and conference registration fees for the graduate student to attend a regional/national domestic conference (TBD; \$350).

IPHC Total: \$9,552

<u>Year 1:</u> \$7,750.50

Genome sequencing (Novaseq platform; \$5,949 x 1 lane) \$5,949

Cloud computing services (\$600.50/mo. x 3 mo.) \$1,801.50

Contractual costs of \$5,949 for genome sequencing costs at \$5,949/lane and > 250 libraries. Cloud computing services from Microsoft Azure Virtual Machine will be used for bioinformatic analyses.

Year 2: \$1,801.50

Cloud computing services (\$600.50/mo. X 3 mo.) \$1,801.50

Contractual costs of \$1,801.50 for use of a Microsoft Azure Virtual Machine for bioinformatic analyses.

CONSTRUCTION

APU: \$0

IPHC: \$0

AFSC: \$0

OTHER

TOTAL DIRECT CHARGES

APU Total \$23,612.75

A. Personnel	\$6,729
в. Fringe	\$584.75
c. Travel	\$9,199
D. Equipment	\$0
E. Supplies	\$2,400
F. Contractual	\$4,700
G Construction	\$0

G. Construction \$0

н. <u>Other \$0</u>

I. Total Direct Costs \$23,612.75

IPHC Total \$54,885.28

A. Personnel	\$13,332.42
в. Fringe	\$4,426.36
c. Travel	\$5,762
D. Equipment	\$0
E. Supplies	\$21,809
F. Contractual	\$9,552
G. Construction	\$0
н. <u>Other</u>	<u>\$0</u>
ı. Total Direct Costs	\$54,885.28

AFSC Total \$0

INDIRECT CHARGES

APU Total: \$9,917.36

The pre-determined rate is 42% and is computed on a base of \$23,612.75, which includes all direct charges listed above for this institution.

IPHC Total: \$5,488.53

The IPHC charges a de minimis indirect rate of 10% on a base of \$54,885.28, which includes all direct charges listed above for this institution.

TOTALS- DIRECT AND INDIRECT CHARGES

APU Total: \$33,530.11

IPHC Total: \$60,373.81

Project Total: \$93,903.92

ALASKA PACIFIC UNIVERSITY SUBAWARD

MATCH FUNDS BUDGET NARRATIVE

PERSONNEL

APU Total \$17,944

Position Title

& Name	Yearly Salary	% of Time	No. of Months	\$Amount
PI, Nathan Wolf	\$107,644	%16.67	2	\$17,944

<u>Principal Investigator – Nathan Wolf:</u> This position directs the overall operation of the project and will work with co-PI, Josep Planas, on project coordination, administration, reporting and publication, and co-supervision of the graduate student. This position is responsible for overseeing coordination with other agencies and is the responsible authority for ensuring necessary reports/documentation are submitted to UAF Sea Grant. This position relates to all program objectives. Nathan Wolf will provide a total of 1 month effort per year at \$8,972/year, for a total of \$17,944 in match support.

IPHC Total \$35,379.84

Position Title

& Name	Yearly Salary	% of Time	No. of Months	\$Amount
PI, Josep Planas	\$142,767	%16.67	2	\$23,677.92
Collaborator, Andy Jasonowicz	\$70,551	%16.67	2	\$11,701.92

<u>Co-Principal Investigator – Josep Planas</u>: This position assists in the overall operation of the project and will work with PI, Nathan Wolf, on project coordination, administration, reporting and publication, and co-supervision of the graduate student. This position is responsible for assisting the PI with agency coordination and submission of necessary reports/documentation to UAF Sea Grant. This position relates to all program objectives. Josep Planas will provide a total of 1 month effort for \$11,664 in Year 1 and 1 month effort for \$12,013.92 in Year 2 in match support.

<u>Collaborator – Andrew Jasonowicz</u>: This position will be responsible for instructing and assisting the graduate student with the proposed library preparation and with sequencing and implementing the bioinformatic approach. This position will assist with training, documentation, and reporting and publication. Andrew Jasonowicz will provide a total of 1 month effort for \$5,765 in Year 1 and 1 month effort for \$5,936.92 in Year 2 in match support.

AFSC Total \$0

Position Title

& Name	Yearly Salary	% of Time	No. of Months	\$Amount
Co-PI, Wes Larson	\$0	%0	0	\$0

<u>Co-Principal Investigator – Wes Larson:</u> This position will assist PI, Nathan Wolf, and co-PI, Josep Planas, on project coordination, publication, and co-supervision of the graduate student. This position will assist with the development of a high-throughput panel for Pacific halibut aging and will train the graduate student at the NOAA Auke Bay laboratory in this method. This position specifically relates to phase 3 of the project, and will also transfer this technology to the NOAA Alaska Fisheries Science Center. This position is not requesting any funding support from this project.

FRINGE BENEFITS

APU Total \$1,559

Position Title

& Name	Yearly Salary	% Rate	\$Amount
PI, Nathan Wolf	\$8,972	8.69	\$1,559.33

The base fringe benefit rate for APU employees for years one and two is calculated at 8.69%, comprised of FICA, Medicare, and ESC (state unemployment tax). In Year 1, Nathan Wolf's match salary of \$8,972 equates to a total of \$776.67 in fringe benefits. In Year 2, the match salary of \$8,972 equates to a total of \$776.67 in fringe benefits.

IPHC Total \$11,568

Position Title

& Name	Yearly Salary	% Rate	\$Amount
PI, Josep Planas	\$	33.2	\$7,740.93
Collaborator, Andy Jasonowicz	\$	33.2	\$3,827.48

The fringe benefit rate for full-time employees for years one and two is calculated at 33.2%. In Year 1, Josep Planas's match salary of \$11,664 equates to \$3,872.45 in fringe benefits, and Andy Jasonowicz's match salary of \$5,765 equates to \$1,856.33 in fringe benefits. In Year 2, Josep Planas's match salary of \$12,013.92 equates to \$3,868.48 in fringe benefits, and Andy Jasonowicz's match salary of \$5,936.92 equates to \$1,971.15 in fringe benefits.

AFSC Total \$0

Position Title

& Name	Yearly Salary	% Rate	\$Amount
Co-PI, Wes Larson	\$0	%0	\$0

The AFSC is not requesting any funding support for fringe benefits.



Department of Commerce

National Oceanic and Atmospheric Administration (NOAA)
OAR National Sea Grant College Program (SG)

Notice of Award (NoA) NA240ARX417C0027-T1-01

RECIPIENT INFORMATION

1. Recipient Name

UNIVERSITY OF ALASKA FAIRBANKS 2145 N TANANA LOOP FAIRBANKS, AK 99775

2. Congressional District of Recipient

- 3. Employer Identification Number (EIN) 926000147
- 4. UEI

FDLEQSJ8FF63

5. Recipient Point of Contact

Ginny Eckert (Contact) gleckert@alaska.edu

6. Authorized Official

Ginny Eckert gleckert@alaska.edu

FEDERAL AGENCY CONTACT INFORMATION

7. Grant Specialist

Amanda Stussman amanda.stussman@noaa.gov

8. Program Officer

Rebecca Briggs rebecca.briggs@noaa.gov

9. Grant Officer

Angela Carpenter angela.carpenter@noaa.gov

FEDERAL AWARD INFORMATION

10. Award Number / FAIN

NA240ARX417C0027-T1-01 / NA240ARX417C0027 / Mod 0

11. Award Type

Cooperative Agreement

12. Period of Performance Start Date & End Date

02/01/2024 - 01/31/2028

13. Federal Share of Cost

\$1,914,321

14. Recipient Share of Cost

\$957,161

15. Total Federal and Recipient Cost

\$2,871,482

16. Opportunity Number

NOAA-OAR-SG-2024-23187

17. Project Title

Alaska Sea Grant 2024-2027 Omnibus

18. Assistance Listing Number and Name

11.417 Sea Grant Support

19. Award Action Type

New Competing

20. Multiyear Award?

Yes

21. R&D Award?

Yes

22. Construction Award?

No

23. Grants Officer - Signature and Date

RAISHAN ADAMS - 05/31/2024

DocuSigned by:

Kimberly Cox

University of Alaska Fairbanks

Authorized Organizational Representative



Department of Commerce NOAA OAR National Sea Grant College Program (SG)

Notice of Award NA240ARX417C0027-T1-01

NOTICE OF NOAA AWARD COVER LETTER

Congratulations, you are the recipient of NOAA award Number NA240ARX417C0027-T1-01.

This Notice of Award (NoA) approved by the NOAA Grants Officer, constitutes the official grant award and the obligation of Federal funding. The NoA serves as the official legal document issued to notify the recipient and others that an award has been made. The NoA contains all terms and conditions of the grant award.

The complete NoA can be found and downloaded under eRA Commons using the following instructions: <u>View Notice</u> of Award | eRA

This NoA was sent to the specified email address entered in the NoA email field by the recipient organization when completing the electronic Research Administration (eRA) Commons registration process. The Signing Official (SO) can update this email address through the Institutional Profile section in eRA Commons. The NoA can also be viewed from the *Status Information* page in eRA Commons. By accepting the award, the recipient agrees to comply with the award provisions specified on the award document.

As the Signing Official (SO) you are authorized to legally bind the institution in grant-administration matters. In providing your signature approval on the grant application submission you are responsible for monitoring grant related activities and authorizing expenditures under this award.

Additional Information about your award is shown below:

- Assistance Listing Number: 11.417
- Project Period: 02/01/2024 01/31/2028
- Program Office: OAR National Sea Grant College Program (SG)
- Program Officer: Rebecca Briggs
- · Program Officer Phone:
- Program Officer Email: rebecca.briggs@noaa.gov
- Total Federal Funding: \$1,914,321
- Total Non-Federal Funding: \$957,161
- Organization Name: UNIVERSITY OF ALASKA FAIRBANKS
- Project Title: Alaska Sea Grant 2024-2027 Omnibus
- Name of Principal Director/Project Investigator (PI/PD) as identified in the negotiated application:
 - o Molly Cain
 - o Brooke Carney
 - o Gabriel Dunham
 - o Ginny Eckert (contact)

This email was sent from a source that is not monitored for responses. If you need assistance, contact your Program/Project Officer (for programmatic issues) or the eRA Help Desk (for technical issues).

SECTION I - BUDGET INFORMATION

Approved Budget

	Year 1 Federal	Year 2 Federal	Year 3 Federal	Year 4 Federal	Total
Fed-NonFed	\$243,587	\$249,676	\$245,101	\$240,141	\$978,505
Senior/Key					
Personnel					
Fed-NonFed Other	\$603,838	\$611,148	\$546,991	\$545,632	\$2,307,609
Personnel					
Fed-NonFed Travel	\$125,106	\$151,384	\$107,336	\$119,477	\$503,303
Fed-NonFed	\$60,047	\$45,810	\$46,647	\$42,510	\$195,014
Participant/Trainee					
Fed-NonFed Other	\$481,515	\$486,750	\$554,792	\$540,691	\$2,063,748
Total Direct Charges	\$1,514,093	\$1,544,768	\$1,500,867	\$1,488,451	\$6,048,179
Indirect Charges	\$400,228	\$369,553	\$413,454	\$425,870	\$1,609,105
Federal	\$1,914,321	\$1,914,321	\$1,914,321	\$1,914,321	\$7,657,284
Non-Federal	\$957,161	\$957,161	\$957,161	\$957,161	\$3,828,644

Authorized

	Cumulative		
Federal	\$1,914,321		
Non-Federal	\$957,161		
Total	\$2,871,482		

Authorized Funding Codes

					Cumulative
140Y8R3B03	24P00	1450420000000000	41001200	SG OMNIBUS	\$554,655
		00		ADMIN	
140Y8R3BAC	24PRS	1450420000000000	41001200	SGAQUACULTURER	\$96,375
		00		ES	
140Y8R3B04	24P00	1450420000000000	41001200	SG OMNIBUS EXT	\$673,022
		00		ED	
140Y8R3B02	24P00	1450420000000000	41001200	SG OMNIBUS RES	\$590,269
		00			
	\$1,914,321				

SECTION II - NOAA STANDARD TERMS AND CONDITIONS

- 2 CFR PART 200, UNIFORM ADMINISTRATIVE REQUIREMENTS, COST PRINCIPLES, AND AUDIT REQUIREMENTS, AS ADOPTED PURSUANT TO 2 CFR § 1327.101 https://www.ecfr.gov/current/title-2/subtitle-A/chapter-II/part-200?toc=1
- DEPARTMENT OF COMMERCE FINANCIAL ASSISTANCE STANDARD TERMS AND CONDITIONS
 https://www.commerce.gov/oam/policy/financial-assistance-policy
 The Department of Commerce Financial Assistance Standard Terms and Conditions (ST&C) issued
 November 12, 2020, are incorporated by reference into this award.
- Bureau Financial Assistance Standard Terms and Conditions
 Administrative Standard Award Conditions for National Oceanic and Atmospheric Administration (NOAA)

 Financial Assistance Awards U.S. Department of Commerce
- Department of Commerce Pre-Award Notification Requirements for Grants and Cooperative Agreements (REF: 79FR 78390)
 https://www.govinfo.gov/content/pkg/FR-2014-12-30/pdf/2014-30297.pdf
- FEDERAL-WIDE RESEARCH TERMS AND CONDITIONS, AS ADOPTED BY THE DEPT. OF COMMERCE https://www.nsf.gov/awards/managing/rtc.jsp

R & D AWARD

Awards - Federal-Wide Research Terms and Conditions | NSF - National Science Foundation

SECTION III - SPECIFIC AWARD CONDITIONS

SPECIAL TERMS

Foreign Air Carrier

The recipient shall comply with the provisions of the Fly America Act (49 U.S.C. § 40118). The implementing regulations of the Fly America Act are found at 41 C.F.R. §§ 301-10.131 through 301-10.143. If a foreign air carrier is anticipated to be used for any portion of travel under a DOC financial assistance award the recipient must receive prior approval from the Grants Officer.

Sea Grant Project Extension

Authority is delegated to the Recipient to extend any projects or subawards incorporated in this Sea Grant Omnibus award up to, but not beyond, the approved grant project period without prior approval by the NOAA Grants Officer. NOAA's Sea Grant Program must be notified in writing of any such task extensions in the annual performance reports.

Statutory Authority

The legal authority for this award can be found in 33 U.S.C. 1121 et seq., as amended, which are incorporated by reference into this award.

Use of NOAA Emblem

The National Oceanic and Atmospheric Administration (NOAA) holds federal trademark registrations for the NOAA emblem and asserts common law trademark rights in the Sea Grant logo. Recipient is permitted to use the NOAA emblem and Sea Grant logo pursuant to the below terms and conditions for the following limited purposes and in the following manner:

- o Recipient shall ensure the NOAA emblem **and** the Sea Grant logo are placed on all print and digital media produced by the recipient and subrecipients under this award, including, but not limited to, scientific posters and presentations, extension products, and administrative materials such as conference agendas and program websites. This logo placement is in addition to the acknowledgement of sponsorship statement required for publications and videos by the Department of Commerce Standard Terms and Conditions.
- Use of the NOAA emblem and the Sea Grant logo shall be in compliance with style guidance and standards specified at https://seagrant.noaa.gov/inside-sea-grant/communications/.
- o The Sea Grant logo may be either the approved program-specific logo or the national Sea Grant logo without the program designation.

Recipient may not use the NOAA emblem or Sea Grant logo for other purposes, including lobbying or issue advocacy, endorsing a product or organization, or communications to elected officials or federal agencies. Recipient may not use the NOAA emblem or Sea Grant logo in a negative or defamatory manner. Recipient must request and obtain OAR permission prior to certain uses of the NOAA emblem or Sea Grant logo (see section 2, below).

Grant of License: OAR hereby grants to Recipient a non-exclusive, royalty-free right to
use the NOAA emblem and Sea Grant logo for the limited purposes described above
(the "License"). Recipient agrees that: (1) the NOAA emblem and Sea Grant logo will
not be used in a way that would suggest that they are the property of Recipient or any
other third party, and (2) Recipient will include the following notice in conjunction with its

- use of the NOAA emblem and Sea Grant logo, as appropriate: "The NOAA emblem and Sea Grant logo are trademarks of the National Oceanic and Atmospheric Administration (NOAA), used with permission." This License does not grant Recipient the right to use any seal, emblem, logo, or other symbol of the U.S. Department of Commerce, NOAA, or OAR that is not the NOAA emblem or Sea Grant logo.
- 2. Required Approvals for Certain Uses of the NOAA emblem and Sea Grant logo: Before Recipient uses the NOAA emblem or Sea Grant logo for press releases, Recipient shall send a sample of each print, product, design, or other work to show the proposed use to the OAR Public Affairs Specialist (whose contact information may be obtained from NSGO Communications or sgweb@noaa.gov). Recipient shall not use the NOAA emblem or Sea Grant logo for the above purposes until receiving written approval (including via email) from OAR of the proposed use.
- Quality Control: OAR shall have the right, at all reasonable times, to inspect Recipient's goods, services, and promotional activities employing the NOAA emblem or Sea Grant logo to ensure that such use is of proper quality and otherwise consistent with this License.
- 4. <u>Duration and Termination</u>: The License shall terminate on the Award End Date. Recipient may request a renewal of the License for an additional term subject to the express written consent of OAR. Such consent shall be in the form of a properly executed agreement signed by authorized signatories of OAR and Recipient. Upon termination of the License, all rights of Recipient to use the NOAA emblem and Sea Grant logo shall immediately terminate. OAR may terminate the License unilaterally and without cause at any time, including if OAR determines that Recipient's use of the NOAA emblem or Sea Grant logo is inconsistent with the License.
- 5. Validity and Ownership of NOAA emblem and Sea Grant logo: Recipient acknowledges and agrees that NOAA is the owner of all right, title, and interest in the NOAA emblem and Sea Grant logo, and all such right, title, interest, and ownership shall remain with NOAA. Recipient further acknowledges that Recipient shall not acquire any right, title, interest, or ownership in the NOAA emblem or Sea Grant logo by virtue of the License or use other than the license granted hereunder and disclaims any such right, title, interest, or ownership. Recipient is prohibited from interfering with NOAA's rights in the NOAA emblem and Sea Grant logo, including challenging NOAA/OAR's use, registration of, or application to register the NOAA emblem or Sea Grant logo alone or in combination with other words or designs, as a U.S. or foreign trademark anywhere in the world. Recipient is further prohibited from attempting to register the NOAA emblem or Sea Grant logo, any derivatives thereof, or any confusingly similar mark, whether or not registered by NOAA or OAR, alone or in combination with other words or designs, as a U.S. or foreign trademark or as a part of a domain name.
- 6. <u>Assignments and Sub-Licenses</u>: The License is not assignable, and any attempt by Recipient to assign any portion of the License shall be deemed a breach of the License and will result in immediate termination of the License. Recipient may subcontract, thereby engaging in a limited sublicensing arrangement as applicable, for manufacturing and distribution activities under the License; Recipient shall provide notice to NOAA's National Sea Grant Office (NSGO)—and must receive prior approval from NSGO Communications—of any such subcontract prior to manufacturing and distribution activities.
- 7. <u>Governing Law</u>: The License shall be interpreted and implemented in accordance with the Federal common law as interpreted by the U.S. District Court for the District of Columbia, without giving effect to any conflict of law principle that would result in the application of the substantive law of another jurisdiction.

- 8. <u>Indemnification</u>: Recipient agrees to indemnify and hold NOAA and OAR harmless from any and all claims, damages, and attorneys' fees arising from the use of the NOAA emblem or Sea Grant logo by the Recipient and its operations, except to the extent that any such claims, damages, or attorneys' fees arose in connection with any act or failure to act by the U.S. Department of Commerce or any agency, department, or subdivision thereof.
- Obtaining the NOAA emblem and Sea Grant logo: For an electronic version of the NOAA emblem and Sea Grant logo, Recipient should contact NSGO Communications or sgweb@noaa.gov.

Cooperative Agreement

The Cooperative Agreement (CA) is between the National Oceanic and Atmospheric Administration's (NOAA) National Sea Grant Office (NSGO) and the recipient. The substantial involvement between the Federal Agency and the recipient during performance of the activity includes working with their Federal Program Officer in the National Sea Grant Office to conduct their biennial research competition and any additional competitions within the award time frame. The recipient also worked collaboratively with the National Sea Grant Office on their FY2024-27 Strategic Plan, which informed the development of this application and the goals and outcomes of the work being performed.

P/2024-09- Future Competitive Research

Project will include future support of individual projects. Initiation of any selected project will not begin until FPO has certified that that project was competed and selected according to the rules of the selection process. This project contains future competed projects in FY26-27 totaling \$695129 Federal and \$347565 match.

R/2024-04- Permit or Additional Documentation Required

To complete environmental review for the actions proposed in this financial assistance award application under project R/2024-04, "Quantifying the Influence of Environmental Conditions on Potential Trophic Interactions and Growth of Juvenile Sockeye Salmon & Threespine Stickleback within Iliamna Lake", NOAA must review final approved permits. The applicant must provide the following information in response to this Special Award Condition: Copy of permits for Aquatic Resource Collection (e.g. fish). No Aquatic Resource Collection as part of this project can begin until all documents are submitted and accepted by NOAA.

R/2024-01- Permit or Additional Documentation Required

"To complete environmental review for the actions proposed in this financial assistance award application under project R/2024-01, "Integrating emerging technologies with community-based observations to assess spotted seal ecology at terrestrial haul-outs in Arctic Alaska", NOAA must review final approved permits. The applicant must provide the following information in response to this Special Award Condition: Copy of Bureau of Land Management for spotted seal studies. No spotted seal studies as part of this project can begin until all documents are submitted and accepted by NOAA.

R/2024-06- Permit or Additional Documentation Required

To complete environmental review for the actions proposed in this financial assistance award application under project R/2024-06, "Nature-based and community-engaged Arctic coastal protection", NOAA must review final approved permits. The applicant must provide the following information in response to this Special Award Condition: Copy of permits for soil sample collection. No soil sample collection as part of this project can begin until all documents are submitted and accepted by NOAA.

A/2024-01- Permit or Additional Documentation Required

To complete environmental review for the actions proposed in this financial assistance award application under project A/2024-01, "Ecosystem Monitoring in Support of Healthy Communities and Ecosystems", NOAA must review final approved permits. The applicant must provide the following information in response to this Special Award Condition: Copy of permits for harmful algal bloom collection, intertidal algae, invertebrate, and fish collection, scraping and monitoring pvc plates for invasive species, and trapping Eastern Green Crabs. No harmful algal bloom

collection, intertidal algae, invertebrate, and fish collection, scraping and monitoring pvc plates for invasive species, and trapping Eastern Green Crabs as part of this project can occur ntil all documents are submitted and accepted by NOAA.

Matching Requirement (New Award)

Since this award requires the Recipient to provide \$957,161 in project-related costs from non-Federal sources, the Recipient must maintain in its official accounting records an accounting of \$2,871,482.

New Award (New)This award number NA24OARX417C0027-T1-01 to UNIVERSITY OF ALASKA FAIRBANKS supports the work described in the Recipient's proposal entitled "Alaska Sea Grant 2024-2027 Omnibus", dated 10/26/2023, which is incorporated into the award by reference. Where the terms of the award and proposal differ, the terms of the award shall prevail.

Multi-Year Award (New)

The award period and budget(s) incorporated into this award cover a 4-year period for a total amount of \$7,657,284 in Federal funds. However, Federal funding available at this time is limited to \$1,914,321 for this funding period. Receipt of any prospective funding is contingent upon the availability of funds from Congress, satisfactory performance, continued relevance to program objectives, and will be at the sole discretion of the Department of Commerce. The Department of Commerce is not liable for any obligations, expenditures, or commitments which involve any amount in excess of the Federal amount presently available. The Recipient will be responsible for any and all termination costs it may incur should prospective funding not become available. No legal liability will exist or result on the part of the Federal Government for payment of any portion of the remaining funds which have not been made available under the award. Notifications affecting funding or notice of non-availability of additional funding for prospective years will be made only by the Grants Officer. The amendment to obligate prospective funding available shall be made via an Amendment to Financial Assistance Award, if at all possible prior to the expiration of each year's activities.

The funding period for this award is 02/01/2024 through 01/31/2025 and may be extended through 01/31/2028.