

WASHINGTON SEA GRANT - EXAMPLE BUDGET JUSTIFICATION

JUSTIFICATION - FY 2012

A. SALARIES AND WAGES

1. SENIOR PERSONNEL

a. (Co) Principal Investigator(s) - \$11,952 Total

Associate Professor, A. Smith - 1 month (1.0 FTE) Sea Grant: \$7,968 + 0.5 months (1.0 FTE) grantee share: \$3,984 = \$11,952. Smith will oversee and manage the project, conduct toxin challenges and participate in sampling, data analyses and outreach.

2. OTHER PERSONNEL

c. Res. Asst/Grad. Student(s) - \$20,154 Total

PhD-level research assistant graduate student - 1 months (1.0 FTE) Sea Grant: \$3,359 + 5 months (1.0 FTE) grantee share: \$16,795 = \$20,154. The PhD student will assist in all aspects of the study, including larval rearing, sampling, physiological response data collection, gene expression analysis (transcriptomics and qPCR) and outreach.

g. Technician(s) - \$9,500 Total

Research technician, TBD1 - 2 months (1.0 FTE) Sea Grant: \$7,600 + 0.5 month (1.0 FTE) grantee share: \$1,900 = 9500. Technician (TBD) will assist with toxin analyses, transcriptomics and qPCR.

B. FRINGE BENEFITS - \$8,953 Total

SG \$8,953, match \$0. Approved institutional rates were applied for each individual when calculating fringe benefits. Fringe benefits are calculated at a rate of 25% for faculty and research associates, 30.6% for professional and technical staff, 14.7% for research assistant graduate students.

C. PERMANENT EQUIPMENT - \$5,200 Total

SG \$5,200, match \$0. We request \$5,200 for purchase of a toxin delivery system that consists of an air compressor: \$800; 4 mass flow controllers: \$2000 (\$500 per unit); 2 Valco valves: \$900 (\$450 per unit); plumbing: \$800; box for transport: \$700. The custom system required for this research is not available for lease.

D. EXPENDABLE SUPPLIES AND EQUIPMENT - \$7,985 Total

SG \$7,985, match \$0. (i) Chemicals and Biochemicals (\$6,185). Included in this category are supplies for algal culture (Guillard's F/2 medium), gene expression analyses (Qiagen RNA soil kits; mRNA-Seq Sample Prep and Cluster Generation kits, Illumina, qPCR supplies), and scanning electron microscopy sample preparation (2% glutaraldehyde, 1% paraformaldehyde, sodium cacodylate buffer, Osmium Tetroxide).

(ii) Disposable supplies (\$1,000). This category includes disposable items such as glassware, larval rearing chambers, pipette tips, lab safety supplies, banjo filters, 20 um nylax screens and multiwell plates. Disposable items are required for larval husbandry, toxin challenge experiments, gene expression analyses and scanning electronic microscopy sample preparation.

(iii) Field supplies (\$800). This category includes tank fills for diving and dive grab bags, required for collecting adult brood stock; and cool boxes and battery-operated aerators, to transport live broodstock to hatchery facilities. All other dive equipment is provided by the principal investigator's research laboratory.

E. TRAVEL

1. Domestic - US and its Possessions (inc. Puerto Rico) - \$1,740 Total

SG \$1,790, match \$0. We request \$1,790 for the graduate student to attend the 2013 National Shellfish Association meeting (location to be announced). Estimated airfare, \$800. Hotel costs estimated at rate of \$150 per night for 4 nights = \$600. Per diem estimated at \$60/day for 4 days = \$240. Airport shuttles estimated at \$25 per journey, 4 journeys = \$100. This is the premier national meeting for this field and will provide the opportunity to network with researchers on complementary projects and for the graduate student to present the project work.

F. PUBLICATIONS AND DOCUMENTATION COSTS - \$500 Total

SG \$500, match \$0. \$500 is requested to print 20 sets of the K-12 curriculum developed as a component of the outreach plan for the project. Costs are \$200 for design work plus printing for 20 sets at \$15 each.

G. OTHER COSTS

1. Tuition NOT subject to indirect cost : One year of tuition - \$12,617 Total

SG \$4,983, match \$7,634. Summer quarter tuition for the graduate student will be \$1,166 as the student will only register for 2 units in the summer as per departmental policy for students not taking summer classes. One quarter of full tuition (\$3817) for the graduate student is requested in Sea Grant funds for Winter 2012 and 2 quarters are provided as match for Spring and Fall, 2012 (\$3817 x 2 = \$7634). Tuition is not subject to indirect.

2. Other cost subject to indirect : Scanning Electronic Microscopy - \$452 Total

SG \$452, match \$0. \$452 is requested for 4 hours of Scanning Electron Microscope time (\$113 per hour) at the University of Washington Electron Microscopy Resource Center, Pathology EM Lab. Images will be captured on a JEOL JSM 6300F SEM, which provides the resolution required for accurate larval morphology measurements.

3. Other cost NOT subject to indirect : UW small vessel charter - \$1,971 Total

SG \$1,971, match \$0. We will rent a university-owned small research vessel (\$1,971/month x 1 month) for collecting adult bivalves to be used as broodstock for larvae production. UW-owned vessel rental is not subject to indirect costs.

4. Sub-award : NW Shellfish R&D - \$35,112 Total

A. SALARIES AND WAGES

1. SENIOR PERSONNEL

a. (Co) Principal Investigator(s) - \$19,200 Total

SG \$11,600, match \$7,600.

Fredrick Murphy, NW Shellfish R&D senior researcher - 0.5 months (1.0 FTE) Sea Grant: \$3,600 + 0.5 months (1.0 FTE) grantee share: \$3,600 = \$7,200. Murphy will be responsible for broodstock collection and the production of marine larvae for three bivalve species.

Sam Rogers, technician - 2 months (1.0 FTE) Sea Grant: \$8,000 + 1 month (1.0 FTE) grantee share: \$4000 = \$12,000. Rogers will assist with broodstock collection and larval rearing at the NW Shellfish R&D hatchery.

2. OTHER PERSONNEL

None

B. FRINGE BENEFITS - \$3,072 Total

Fringe benefits are calculated at a rate of 16% for all NW Shellfish R&D employees.

C. PERMANENT EQUIPMENT

None

D. EXPENDABLE SUPPLIES AND EQUIPMENT - \$4,860 Total

SG \$3,860, match \$1,000. We request Sea Grant funds for expendable supplies for broodstock collection, including nets and holding tanks (\$500), and larval rearing (\$3,360). An additional \$1000 for larval rearing supplies is provided NW Shellfish R&D.

E. TRAVEL

1. Domestic - US and its Possessions (inc. Puerto Rico) - \$500 Total

SG \$300, match \$200. \$300 is requested for F. Murphy to attend biannual meetings at the University of Washington (2 x mileage, ferry fares, hotel accommodation & per diem). \$200 for local travel to broodstock collection sites is provided by NW Shellfish R&D.

F. PUBLICATIONS AND DOCUMENTATION COSTS

None

G. OTHER COSTS - \$1,000 Total

1. Other cost NOT subject to indirect: Small Vessel Rental

SG \$0, match \$1,000. \$1000 for small vessel costs is provided by NW Shellfish R&D.

INDIRECT COSTS - \$7,680 Total

SG \$0, match \$7,680. NW Shellfish R&D operates under an indirect cost rate of 28%

INDIRECT COSTS - \$21,784 Total

[off-campus - 26%] includes: salaries, fringe benefits, expendable eq., travel, publications, other costs

This field and laboratory research project is being conducted at an off-campus field site and facility and the indirect cost rate of 26.0% (off campus) is being used.