**BUDGET JUSTIFICATION**

Budget assumes a *4%* escalation in salaries and tuition per year.

The University of Massachusetts Lowell (UML) designates a year based upon a fiscal year, which runs from July 1 through June 30th each year.

**Senior Personnel**

*XXX, PhD,* Principal Investigator will receive *X academic months, X summer months* support for each year of the project. *Dr. XXX* is a *X of X* at the University of Massachusetts Lowell and will be responsible for the overall coordination of the project and supervision of the project personnel. *Provide additional detail here of relevant work or accomplishment, showing suitability to the project*

*Year 1: $X; Year 2: $X; Year 3: $X; Cumulative: $X*

*Co-PI Name, Co-PI,* is a *X of X* at the University of Massachusetts Lowell and will receive *X academic months, X summer months* support for each year of the project. He/she will *X*.

*Year 1: $X; Year 2: $X; Year 3: $X; Cumulative: $X*

**Other Personnel** *(includes non-key personnel, that is, members who will not be playing a leadership role, but will contribute through their labor, such as a data analyst, project manager, graduate students, postdocs, technicians, etc.)*

*XXX*, Data Analyst will receive *X academic months, X summer months* support each year of the project. The data analyst will *(provide detail of what the DA will be doing on this project).*

*Year 1: $X; Year 2: $X; Year 3: $X; Cumulative: $X*

*XXX*, Project Manager will receive *X academic months, X summer months* support each year of the project. The project manager will *(provide detail of what the PM will be doing on this project).*

*Year 1: $X; Year 2: $X; Year 3: $X; Cumulative: $X*

TBN, Post-Doctoral Fellow will receive *X academic months, X summer months* support each year of the project. The post-doctoral fellow will *(provide detail of what the PD will be doing on this project).*

*Year 1: $X; Year 2: $X; Year 3: $X; Cumulative: $X*

TBN Doctoral Student Research Assistant will receive *X academic months, X summer months* of calendar support each year of the project. The RA will *(provide detail of what the RA will be doing on this project).*

*Year 1: $X; Year 2: $X; Year 3: $X; Cumulative: $X*

**Fringe Benefits**

Fringe benefits included in the estimates for personnel were calculated in accordance with the University of Massachusetts Lowell rate agreement negotiated with the Department of Health and Human Services on November 8, 2023.

Fringe rates are calculated as follows:

*2.11% for PI summer support, student employees (Student Research Assistant)*

*45.31% plus $16.50 per week for Health and Welfare costs, for full time benefitted employees (Data Analyst, Project Manager, Post-Doctoral Fellow)*

*11.43% for Graduate Student Research Assistant*

*Cumulative: $X*

**Equipment**

*List the equipment you are requesting for the project. Each individual equipment item or total of all components must cost at least $5,000 and have a useable life of more than 1 year. Include model number and price quote from a reputable source, listing name of source. Explain the necessity of the equipment to the project, and how this time will be used by the different parties in the proposal.*

Equipment funds are requested in year one to purchase:  *List all equipment to be purchased for use on the project and provide the cost for each individual piece of equipment or distinct component*

*Cumulative: $X*

**Travel**

*Funds may be requested for field work, attendance at meetings and conferences, and other travel associated with the proposed work, including subsistence. Attendance at meetings or conferences must be necessary to accomplish proposal objectives or disseminate its results.*

*Please read the RFA carefully to ensure that you’ve included any required travel, for instance for the PI to travel to NSF-sponsored events relevant to the project.*

Domestic Travel - *Provide the purpose of the trip, number of trips, number of days per trip, location, and number of people per trip.*

*Cumulative: $X*

Foreign Travel - *Provide the purpose of the trip, number of trips, number of days per trip, location, and number of people per trip. Provide the countries to be visited in the budget justification.*

*Cumulative: $X*

**Participant Support Costs** *(A participant is defined as an educational participant, someone who is not bound by contract in the way an employee is to produce a specific product. Usually the participant is participating in an educational capacity, and benefits from the project’s educational goals.)*

* *List number of participants per year.*
* *List the stipend each participant will have, and what expenses are figured into the provision of the stipend.*
* *List amount allotted for travel. Do not add this amount to the amount listed in “E Travel,” which is for key personnel and other personnel. Explain the purpose of the travel.*
* *List amount allotted for subsistence, which could be a food per diem. Specify the period for which you are providing assistance for subsistence.*
* *List any other expense associated for the participants, and how this is relevant and necessary to the project (e.g., supplies, printing of materials, etc.).*

*Cumulative: $X*

**Materials and Supplies**

*Expenditures budgeted for this proposal are costs that can be identified specifically with this particular sponsored project and are required in the direct performance of the research. These expenses include applicable laboratory supplies.*

* *Itemize materials and supplies to be purchased, using best estimate on amount per category. Make sure all materials match the budget when summed.*

*Cumulative: $X*

**Publication costs**

*Many journals require a per-page or per-article publication cost, and these fees should be paid for through your grant. Other publication costs, including posters for meetings, should also be included.*

*Publication costs are requested to…*

*Cumulative: $X*

**Consultant Services**

*Please make sure consultants are well justified. Provide Name for each Consultant and itemize each consultant, rate per day, number of days, any additional costs such as travel, lodging, supplies, and total costs for each consultant. If the consultant is named – Sponsored Projects Services requests a letter of support with the above details prior to submission.*

*X*  is an expert in *X*. He/she will devote a total of *X* hours ($*X*/hr) in year *X*.

*Cumulative: $X*

**Computer Services**

*Make certain that the need for any computer-related expenses are justified by the project, and make sure that you remember to include the cost of any software necessary for the project.*

*Cumulative: $X*

**Subcontracts**

*(NSF requires subcontracts to submit separate budget with budget justification. If you have a subcontractor, request these items and ensure they submit a detailed budget and justification on the correct forms.)*

*Identify and briefly describe other institutions involved in the project and total costs requested for each. These costs are part of the prime institutions direct costs which includes the subcontractor’s direct and indirect costs.
A subcontract to XYZ in the amount of $X for X years as described in the proposal is included. The PI of the subcontract is NAME HERE.*

*Cumulative: $X*

**Other**

Student Research Assistant (RA) Fees - The University of Massachusetts Lowell requires a $10,000 contribution from all funded research projects per year, per student, be applied towards the tuition and fees for any employed academic graduate research assistant. Funds of $10,000 are requested to cover these fees.

*Cumulative: $X*

**Total Direct Costs**

*Year 1: $X; Year 2: $X; Year 3: $X; Cumulative: $X*

**Indirect Costs**

The University of Massachusetts Lowell's (UML) indirect costs are calculated based on Modified Total Direct Costs (MTDC) using the federally negotiated indirect cost rate for organized research. Modified total direct costs excludes equipment, capital expenditures, charges for patient care, rental costs, tuition remission, scholarships and fellowships, participant support costs and the portion of each subcontract in excess of $25,000.

Rates established by UML’s F&A rate agreement dated 06/11/2024 are as follows:

* July 1, 2023 to June 30, 2024: 56.5%
* July 1, 2024 to June 30, 2025: 57.0%
* July 1, 2025 to June 30, 2027: 57.5%
* July 1, 2027 to June 30, 2028: 58.0%

*Year 1: $X; Year 2: $X; Year 3: $X; Cumulative: $X*