

**APPENDIX C: Sample Budgets and Justifications****Budget Sample 1:**

Item description	Supplier	Price	Quantity Needed	Total List Price
Pre-coated PAMPA Plate System	BD Biosciences	\$390.11/ 5 pack (96 wells/pack)	1	\$390.11
Propranolol hydrochloride $\geq 99\%$ (TLC), powder	Sigma-Aldrich	\$31.10/1 gram	1 gram	\$31.10
Lucifer Yellow CH dilithium salt	Sigma-Aldrich	\$132.00/25mg	25 mg	\$132.00
TOTAL COST				\$553.21

Budget justification:

1. PAMPA Plate System: My research pertains to the findings of peptides that permeate through a cell membrane. Therefore, I require a parallel artificial membrane permeability assay “PAMPA”, to test the penetrating capabilities of the peptides separated by high performance liquid chromatography “HPLC”. After I separated the conotoxins, we established approximately 2000 samples. Approximately half of these samples registered were hydrophobic. These hydrophobic peptides are what I am interested in testing through Pampa. I have identified approximately 900 peptides as being hydrophobic, and I already have one PAMPA package which contains 5 plates that have 96 wells per plate. This gives me 460 wells that I can place samples into for testing. But this would only be enough to test half of my hydrophobic samples. It is imperative that I have another PAMPA package so I can test all of the samples identified as hydrophobic. I need so many wells because every sample has to be separated and tested individually in order to specifically see which sample has the potential to penetrate a cell membrane.
2. Lucifer Yellow: I need the chemical compound Lucifer yellow to act as one of my controls. This compound is used specifically as a non-permeable control group.
3. Propranolol hydrochloride: Contrary to the Lucifer Yellow I have Propranolol Hydrochloride as our other control due to its ability to penetrate cell membranes because of its lipophilic characteristics. These two controls are needed so I know that the pampa's artificial membrane is working properly and allowing only compounds that are permeable to pass through the membrane and inhibiting all non-permeable compounds from passing through the membrane.

Overage:

Since the total request goes over the allocated \$500 budget, my research advisor has committed to providing the additional \$53.21 in materials as evidenced by his letter of recommendation.

**Budget Sample 2:**

Items description	Supplier	Quantity	Price
GPS-Garmin ETrex 20	Forestry Suppliers	1	199.95
Suunto KB-14 Azimuth Compass Zone 1	Forestry Suppliers	1	99.95
Millimeter graph paper	Forestry Suppliers	1 pack	15.00
ArcGIS annual license	ESRI	1	100.00
Field notebook	Forestry Suppliers	1	15.00
Total amount requested:	429.90		

Budget Justification

1. GPS-Garmin ETrex 20: The GPS Grrmin ETrex will be purchased and used for collecting spatial data for mapping research sites.
2. Suunto KB-14 Azimuth Compass Zone 1. Since much of the research will involve navigating through research sites and will be used for orienteering & walking survey transects
3. Millimeter graph paper: will be purchased for data collection and for drawing maps
4. ArcGIS annual license: This individual student license will be purchased as software used in the discipline for making project maps.
5. Field notebook: I will purchase a field notebook for data collection on-site of field notes.

Generic Budget Sample 3: for travel to research site.

Items Needed	Vendor	Quantity	Price	Budget Justification
Round trip airfare to _____	FAU Travel service	1	215.00	Travel to research archive
Hotel	Days Inn	1	160.00	Lodging (4 nights) while working at archive
Photocopying	Archive	100	10.00	Copies of critical documents
Total amount requested:	385.00			