

Applicant Name: [Last, first name #1; Last, first name #2; Last, first name #3]

Title of work: [Full title of work]

Recommender Name: [Full recommender name and their title]

Summary Table

| Last Name_First Name | Mat/Supp | Serv/Out | Travel | Non-Stipend Subtotal | Stipend Subtotal | Total |
|--------------------------|----------------|-------------|------------|----------------------|------------------|----------------|
| Last Name, First Name #1 | \$2091 | \$0 | \$0 | \$2091 | \$720 | \$2811 |
| Last Name, First Name #2 | \$258 | \$50 | \$0 | \$308 | \$720 | \$1028 |
| Last Name, First Name #3 | \$0 | \$0 | \$0 | \$0 | \$720 | \$720 |
| Total | \$2,349 | \$50 | \$0 | \$2,399 | \$2,160 | \$4,559 |

Itemized Budget with Justification

| Item # | Item Name | Qty. | Cost Per Unit | Cost | Justification |
|------------------------------------|--------------------------|------|---------------|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Materials/Supplies | | | | | |
| 1 | Divers Nylon Weight Belt | 3 | \$9 | \$27 | Weight belt will be used to fasten weights to each individual |
| 2 | Lead 3 LB Scuba Weight | 4 | \$9 | \$36 | Weights will be used to assist individuals stay submerged during algal collection |
| 3 | Sea Sports Tabis | 3 | \$30 | \$90 | Used for feet protection from jagged reef flats |
| 4 | EVO 3mm Kevlar Dive | 3 | \$35 | \$105 | Necessary for testing of the device and fabrication (liquid metal injection) |
| 5 | Wet Suit | 3 | \$175 | \$525 | Wet suits will be used to keep us warm for extended periods of time during algal collection. They will also protect us from getting scraped from the jagged reef flats, especially in our wave prone site. |
| 6 | Dry Bag | 3 | \$22 | \$66 | Used to store important items in the field and to prevent them from water damage |
| 7 | 3D Lidar Scanning Device | 1 | \$1500 | \$1500 | 3D Lidar is necessary to our project, as it provides us with the ability to detect trace amounts of algae blooms in the ocean. Lidar remote sensing will allow us to pinpoint the exact location of the algae we are testing and provide us with the most accurate data. Without this device, we will not be able to execute our methodology as algal fluorescence is not detectable by the naked eye. No comparable devices are available for our use on campus, and our mentor was not able to source it for this project. |
| Materials/Supplies Subtotal | | | | \$2349 | |
| Services/Outsourcing | | | | | |

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|--------------------------------------|-----------------|-----|------|---------------|---------------------------------------------------------------------------------------------------------------------------------|
| 8 | Poster Printing | 1 | \$50 | \$50 | We will be giving a poster presentation at the Undergraduate Showcase and would like to have our poster professionally printed. |
| Services/Outsourcing Subtotal | | | | \$50 | |
| Travel | | | | | |
| Travel Subtotal | | | | \$0 | |
| Non-Stipend Funding Subtotal | | | | \$2399 | |
| Stipend | | | | | |
| 9 | Stipend | 135 | \$16 | \$2160 | Stipend for 3 group members, 45 hours of funding for each person. Please see attached stipend table. |
| Total Funding Requested | | | | \$4559 | |

Outside Funding Source

| Outside Funding Sources | | | | | |
|-------------------------------------|----------------------------------|-----|---------------|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Item # | Item Name | Qty | Cost per Unit | Cost | Justification |
| 1 | College of Engineering, UH Mānoa | 1 | \$2000 | \$2000 | We received \$2000 from the College of Engineering to hire a boat that will take us our team out to the sea in addition to storing our equipment. This funding will not overlap with any other items listed on our budget |
| Outside Funding Source Total | | | | \$2000 | |

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[Last Name, First Name #1] Budget

| Item # | Item Name | Qty. | Cost Per Unit | Cost | Justification |
|--------------------------------|--------------------------|------|---------------|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Materials/Supplies | | | | | |
| 5 | Wet Suit | 3 | \$175 | \$525 | Wet suits will be used to keep us warm for extended periods of time during algal collection. They will also protect us from getting scraped from the jagged reef flats, especially in our wave prone site. No wet suits are available to rent on campus |
| 6 | Dry Bag | 3 | \$22 | \$66 | Used to store important items in the field and to prevent them from water damage |
| 7 | 3D Lidar Scanning Device | 1 | \$1500 | \$1500 | 3D Lidar is necessary to our project, as it provides us with the ability to detect trace amounts of algae blooms in the ocean. Lidar remote sensing will allow us to pinpoint the exact location of the algae we are testing and provide us with the most accurate data. Without this device, we will not be able to execute our methodology as algal fluorescence is not detectable by the naked eye. No comparable devices are available for our use on campus, and our mentor was not able to source it for this project. |
| Materials/Supplies Subtotal | | | | \$2091 | |
| Service/Outsourcing | | | | | |
| Service/Outsourcing Subtotal | | | | \$0 | |
| Travel | | | | | |
| Travel Subtotal | | | | \$0 | |
| Non-Stipend Funding Subtotal | | | | \$2091 | |
| Stipend | | | | | |
| 9 | Stipend | 45 | \$16 | \$720 | See attached stipend table |
| Total Funding Requested | | | | \$2811 | |

[Last Name, First Name #1] Stipend Table

| Date Range | Hours | Cost | Description of Tasks |
|-------------|-------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8/19-9/19 | 11 | \$176 | - Order supplies and gear - Collect and analyze algal biomass samples from all zones - Sort and identify algae to the lowest taxonomic level |
| 9/19-10/19 | 11 | \$176 | Analyze and compare collected data to Doty et al. 1969 data and prepare materials and supplies for Fall collection. |
| 10/19-11/19 | 11 | \$176 | - Collect and analyze algal biomass samples from all zones - Sorting and identifying algae to the lowest taxonomic level - Freezing and preserving samples |

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| | | | |
|---------------|----|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11/19-12/2 | 12 | \$192 | Data analysis and final report compiling |
| Stipend Total | | | |
| 8/19-12/2 | 45 | \$720 | Each member will work 12 hours per week on this project. We are satisfying our group capstone requirement (3 credits) for our degree with this project. We subtracted 9 hours of expected hours per week for 15 weeks and are requesting 3 hours of stipend per group member for 15 weeks. We will use the stipend to support ourselves as we will not be working. This will allow for basic living expenses to be purchased while our full energy can be focused on the project |

SAMPLE

Applicant Name: [Last, first name #1; Last, first name #2; Last, first name #3]

Title of work: [Full title of work]

Recommender Name: [Full recommender name and their title]

[Last Name, First Name #2] Budget

| Item # | Item Name | Qty. | Cost Per Unit | Cost | Justification |
|--------------------------------|----------------------------|------|---------------|---------------|--------------------------------------------------------------------------------------------------------------------------------|
| Materials/Supplies | | | | | |
| 1 | Divers Nylon Weight Belt | 3 | \$9 | \$27 | Weight belt will be used to fasten weights to each individual |
| 2 | Lead 3 LB Weight | 4 | \$9 | \$36 | Weights will be used to assist individuals stay submerged during algal collection |
| 3 | Sea Sports Tabis | 3 | \$30 | \$90 | Used for feet protection from jagged reef flats |
| 4 | EVO 3mm Kevlar Dive Gloves | 3 | \$35 | \$105 | Necessary for testing of the device and fabrication in liquid metal injection |
| Materials/Supplies Subtotal | | | | \$258 | |
| Services/Outsourcing | | | | | |
| 8 | Poster Printing | 1 | \$50 | \$50 | We will be giving poster presentations at the Undergraduate Showcase and would like to have our poster professionally printed. |
| Services/Outsourcing Subtotal | | | | \$50 | |
| Travel | | | | | |
| Travel Subtotal | | | | \$0 | |
| Non-Stipend Funding Subtotal | | | | \$308 | |
| Stipend | | | | | |
| 9 | Stipend | 45 | \$16 | \$720 | See attached stipend table |
| Total Funding Requested | | | | \$1028 | |

[Last Name, First Name #2] Stipend Table

| Date Range | Hours | Cost | Description of Tasks |
|----------------------|-------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8/19-9/19 | 11 | \$176 | - Order supplies and gear - Collect and analyze algal biomass samples from all zones - Sort and identify algae to the lowest taxonomic level |
| 9/19-10/19 | 11 | \$176 | Analyze and compare collected data to Doty et al. 1969 data and prepare materials and supplies for Fall collection. |
| 10/19-11/19 | 11 | \$176 | - Collect and analyze algal biomass samples from all zones - Sorting and identifying algae to the lowest taxonomic level - Freezing and preserving samples |
| 11/19-12/2 | 12 | \$192 | Data analysis and final report compiling |
| Stipend Total | | | |
| 8/19-12/2 | 45 | \$720 | Each member will work 12 hours per week on this project. We are satisfying our group capstone requirement (3 credits) for our degree with this project. We subtracted 9 hours of expected hours per week for 15 weeks and are requesting 3 hours of stipend per group member for 15 weeks. We will use the stipend to support ourselves as we will not be working. This will allow for basic living expenses to be purchased while our full energy can be focused on the project |

Applicant Name: [Last, first name #1; Last, first name #2; Last, first name #3]

Title of work: [Full title of work]

Recommender Name: [Full recommender name and their title]

[Last Name, First Name #3] Budget

| Item # | Item Name | Qty. | Cost Per Unit | Cost | Justification |
|--------------------------------|-----------|------|---------------|--------------|----------------------------|
| Materials/Supplies | | | | | |
| Materials/Supplies Subtotal | | | | \$0 | |
| Services/Outsourcing | | | | | |
| Services/Outsourcing Subtotal | | | | \$0 | |
| Travel | | | | | |
| Travel Subtotal | | | | \$0 | |
| Non-Stipend Funding Subtotal | | | | \$0 | |
| Stipend | | | | | |
| 9 | Stipend | 45 | \$16 | \$720 | See attached stipend table |
| Total Funding Requested | | | | \$720 | |

[Last Name, First Name #3] Stipend Table

| Date Range | Hours | Cost | Description of Tasks |
|----------------------|-------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8/19-9/19 | 11 | \$176 | - Order supplies and gear - Collect and analyze algal biomass samples from all zones - Sort and identify algae to the lowest taxonomic level |
| 9/19-10/19 | 11 | \$176 | Analyze and compare collected data to Doty et al. 1969 data and prepare materials and supplies for Fall collection. |
| 10/19-11/19 | 11 | \$176 | - Collect and analyze algal biomass samples from all zones - Sorting and identifying algae to the lowest taxonomic level - Freezing and preserving samples |
| 11/19-12/2 | 12 | \$192 | Data analysis and final report compiling |
| Stipend Total | | | |
| 8/19-12/2 | 45 | \$720 | Each member will work 12 hours per week on this project. We are satisfying our group capstone requirement (3 credits) for our degree with this project. We subtracted 9 hours of expected hours per week for 15 weeks and are requesting 3 hours of stipend per group member for 15 weeks. We will use the stipend to support ourselves as we will not be working. This will allow for basic living expenses to be purchased while our full energy can be focused on the project |