**Detailed Budget & Budget Narrative**

**Proposal Title:** Development of fast readout Skipper CCDs for Astrophysical Use

**Opportunity:** NNH23ZDA001N-FINESST

**PI & FI institution:** Arizona Board of Regents,University of Arizona

**PI & FI names: Erika Hamden and Brock Parker**

**Project Period: 12/1/2024-11/30/2027**

**Participant Support Costs**

In keeping with NASA SMD’s stated intent in the FINESST solicitation, the University considers the FI to be a “Participant” and budgets all costs for FINESST proposals under the Participant Support Cost category.

**Budget Details**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | **Year 1** | **Year 2** | **Year 3** | **Total** |
|  |  | 12.0 mos | 12.0 mos | 12.0 mos | 36.0 mos |
| **Other Direct Expenses** | |  |  |  |  |
| ***Participant/Trainee Support Costs*** |  |  |  |  |  |
| 1. Tuition/Fees/Health Insurance |  | 12,000 | 7,880 | 6,300 | 19,500 |
| 2. Stipends |  | 38,000 | 40,000 | 41,700 | 120,000 |
| 3. Travel |  | 0 | 2120 | 0 | 8,004 |
| 4. Subsistence |  | 0 | 0 | 0 | 0 |
| 5. Publications |  |  | 0 | 2000 | 2,496 |
| **Total Other Direct Costs** | | **50,000** | **50,000** | **50,000** | **150,000** |
| **Total Direct Costs** | | **50,000** | **50,000** | **50,000** | **150,000** |
| *Total IDC Base* | | *0* | *0* | *0* | *0* |
| **Total IDC** | | **0** | **0** | **0** | **0** |
| **Total Project Costs** | | **50,000** | **50,000** | **50,000** | **150,000** |

**Budget Narrative**

**Other Direct Expenses**

**Participant Support Costs**

In keeping with NASA SMD’s stated intent in the FINESST solicitation, the University budgets all costs for FINESST proposals under the Participant Support Cost category.

1. **Tuition/Fees/Insurance:** A university allowance is budgeted to support the FI's university tuition and fees each year: $4,500/Year 1, $9,802/Year 2, and $12,654/Year 3.
2. **Stipends:** Funding is requested to support the FI via a student stipend in each project year: $38,000/Year 1, $40,000/Year 2, and $41,700/Year 3.
3. **Travel:**  Funds are budgeted to support the FI's travel to one topical scientific conference in each project year. Travel to scientific conferences allows the FI to share research progress and results from this project with the larger planetary science community. Cost estimates were developed using currently posted rates for lodging and per diem, based on travel destination and time of travel, per University policy and published rates found here: https://policy.fso.arizona.edu/fsm/1400/1471.
4. **Domestic travel:** Domestic travel funds in Y2 are requested to support the FI’s travel to the American Astronomical Society (AAS) Meeting.
5. **International travel:** None requested.

Detailed travel costs by year and destination are shown in the tables below:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **DOMESTIC TRAVEL** | | | | | | |
|  | **AAS** | | |  | | |
| *Rates* | *Number night/day/qty* | **Y2** |  |  |  |
| Airfare (Round trip) | $500 | 1 | $500 |  |  |  |
| Lodging | $151 | 7 | $1057 |  |  |  |
| Per Diem | $69 | 5 | $413 |  |  |  |
| Airport parking | $150 | 1 | $150 |  |  |  |
| **Total per trip** |  |  | **$2,120** |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

1. **Publications:** $2,000 in Y3 is budgeted for publication costs to cover open-access publication expenses related to project activities, progress, and results.

**Indirect Costs:** The University of Arizona indirect rate agreement approved by DHHS on April 20, 2023 is 53.5% based on Modified Total Direct Cost (MTDC). **Equipment, capital expenditures, tuition remission, rental costs, participant support, scholarships and fellowships, and the portion of subgrants and subcontracts in excess of $25,000 are excluded from MTDC**. A copy of the University’s DHHS-approved rate agreement dated April 20, 2023 is available online at: https://research.arizona.edu/administration/build-budget/FA-Costs/FA-rates.