

Collaborative Research: Resource of Open Problems for Education (ROPE)

Budget Justification

Dana C. Ernst

A. PERSONNEL

PI Ernst requests one month's summer salary and the associated fringe benefits each year for 3 years. We have assumed a salary increase of 3% per year. During the funding period, the PI will work intensively on the specific tasks listed in the project description and other related items.

Subtotal: \$23,169

B. OTHER PERSONNEL

None.

Subtotal: \$0

C. FRINGE BENEFITS

Fringe benefits were calculated using NAU formulas for benefit rates for FY 2013 (19.9%).

Subtotal: \$4,611

D. EQUIPMENT

None.

Subtotal: \$0

E. TRAVEL

Travel funds are requested to allow the PI to attend national mathematics meetings to disseminate information about ROPE to allow for face-to-face team meetings. Travel to the collaborative PIs' institutions is also planned for meetings with the Advisory Group and External Evaluator. In Years 2 and 3, funds are included to support undergraduate travel to the Joint Mathematical Meetings where they will have a demonstration of ROPE and help staff our booth in the exhibit area at the JMM.

Year 1: The PI is requesting a total of \$4,924.

- \$1,935 for travel to the Joint Mathematics Meetings to meet with PIs.
 - \$240 Registration Fee
 - \$500 Airfare to San Antonio, TX
 - \$900 for lodging (\$225 per night for 4 nights)
 - \$245 for food (\$49 per diem rate for 5 days)
- \$968 for travel to the the University of Michigan to meet with PIs and Advisory Group.
 - \$600 Airfare to Ann Arbor, MI
 - \$200 for lodging (\$100 per night for 2 nights)

- \$168 for food (\$56 per diem rate for 3 days)
- \$2,021 for travel to MathFest to meet with PIs and External Evaluator.
 - \$300 Registration Fee
 - \$750 Airfare to Washington, D.C.
 - \$735 for lodging (\$245 per night for 3 nights)
 - \$236 for food (\$59 per diem rate for 4 days)

Year 2: The PI is requesting a total of \$7,501.

- \$5,585 for travel to the Joint Mathematics Meetings to meet with PIs.
 - \$240 Registration Fee for PI
 - \$110 Registration Fee for undergraduate students (\$55 student registration fee for two students)
 - \$1,650 Airfare to Seattle, WA (\$550 each for PI and two students)
 - \$2,700 for lodging (\$225 per night for 4 nights each for PI and two students)
 - \$885 for food (\$59 per diem rate for 5 days each for PI and two students)
- \$1,916 for travel to MathFest to meet with PIs and External Evaluator.
 - \$300 Registration Fee
 - \$750 Airfare to Columbus, OH.
 - \$690 for lodging (\$230 per night for 3 nights)
 - \$176 for food (\$44 per diem rate for 4 days)

Year 3: The PI is requesting a total of \$8,581.

- \$6,560 for travel to the Joint Mathematics Meetings to meet with PIs.
 - \$240 Registration Fee for PI
 - \$110 Registration Fee for undergraduate students (\$55 student registration fee for two students)
 - \$2,250 Airfare to Atlanta, GA (\$750 each for PI and two students)
 - \$3,300 for lodging (\$275 per night for 4 nights each for PI and two students)
 - \$660 for food (\$59 per diem rate for 5 days each for PI and two students)
- \$2,021 for travel to MathFest to meet with PIs and External Evaluator.
 - \$300 Registration Fee
 - \$750 Airfare to East Coast (location currently unknown).
 - \$735 for lodging (\$245 per night for 3 nights)
 - \$236 for food (\$44 per diem rate for 4 days)

Subtotal: \$21,006

F. PARTICIPANT SUPPORT COSTS

None.

Subtotal: \$0

G. OTHER DIRECT COSTS

None.

Subtotal: \$0

H. TOTAL DIRECT COSTS

The total direct cost is the sum of summer salaries, fringe benefits, and travel for years 1–3.

Subtotal: \$48,786

I. INDIRECT COSTS

Indirect costs are calculated based on Northern Arizona University’s Colleges and Universities Rate Agreement, which stipulates an on-campus rate of 50% MTDC in year 1 and 52% in years 2 and 3, with exclusions for tuition, equipment, and subawards greater than \$25,000.

Subtotal: \$25,091

J. TOTAL DIRECT AND INDIRECT COSTS

This is the sum of items H and I.

Total: \$73,877

K. RESIDUAL FUNDS

None.

Subtotal: \$0

L. AMOUNT OF THIS REQUEST

None.

Total: \$73,877