

## BUDGET JUSTIFICATION – University of Idaho

### Salary

**A. Senior Personnel** – The proposed salaries include 3 weeks of summer salary each year for PI Stanley with a projected cost of living increase of 2.5% reflected in years two and three. The University of Idaho has determined the salary year for senior personnel to be based on the calendar year.

**B. Other Personnel** – The project would support a Ph.D. student for three years and a M.S. student for one year in year 2 on 50% graduate research assistantship at the University of Idaho. This also includes support in summer. Additionally, the project supports one undergraduate student each year working 3-5 hours a week during the semester and 180 hours in summer at \$10/hr. A yearly increase in salaries of 2.5% is projected. Each year, support is included for one week of salary (\$600) for a student working in the STEM-Access TRIO program to help with recruitment, curriculum development, and overall coordination of the geology summer internship program for high school students.

**C. Fringe** – Fringe benefits of 30.7% for senior personnel and 2.1% for students.

### E. Travel

#### **Domestic**

Field work: We have budgeted for three field seasons, 3 weeks in year 1, 6 weeks in year 2, and 3 weeks in year 3. We budget \$70/day for vehicle rental and fuel (per vehicle, with an additional second vehicle for 3 weeks in year 2), \$30/day per person for food and incidentals, and \$25/day for camping fees or motels as needed. We also budget an extra \$70 per year to take the high school interns on a field trip for a day in the area surrounding Moscow. Total: \$19110

Item	Year 1	Year 2	Year 3
Vehicles	\$70*21days = \$1470	\$70*42 days + \$70*21 days= \$4410	\$70*21days = \$1470
Food	\$30*21days*3 people (Stanley, Grad, Undergrad) = \$1890	\$30*42 days*4 people (Stanley, 2xGrad, Undergrad) = \$5040	\$30*21 days*4 people (Stanley, 2xGrad, Undergrad) = \$2520
Camping	\$25*21 days= \$525	\$25*42 days= \$1050	\$25*21 days= \$525
Intern trip	\$70	\$70	\$70

Conferences: We have budgeted for Stanley and a student to attend the AGU or GSA conference in year 2 and year 3, and two students to attend the joint Rocky Mountain & Cordilleran GSA, locally in Spokane, WA, in year 3. Total \$7415

Item	Year 1	Year 2	Year 3
Airfare		\$500*2people = \$1000	\$100 (Milage to Spokane) + \$500*2 people (flights to AGU/GSA) = \$1100
Lodging		\$90*5 days*2 people = \$900 (price based on double occupancy)	\$75*3 days (regional GSA) + \$90*5 days*2 people (AGU/GSA) = \$1125 (prices based on double occupancy)
Per diem		\$55*5 days*2 people = \$550	\$45*3 days*2 people (regional GSA) + \$55*5 days *2 people (AGU/GSA) = \$820
Registration		\$540 + \$290 = \$830	\$130*2 students (regional GSA)+ \$540+\$290 (AGU/GSA) = \$1920

Travel to Purdue for lab work: We budget for one UI graduate student to travel to Purdue University for two weeks in year 2 to complete the  $^4\text{He}/^3\text{He}$  analyses under the supervision of PI Tremblay. \$800 airfare and ground transportation, \$500 2 week rental apartment, \$420 (\$30/day for 14 days) food and incidentals. Total: \$1720.

**F. Participant Support** – \$500 stipend for two high school interns each year for a total of \$3000.

**G. Other Direct Costs**

**1. Materials and Supplies** – We budget \$800 in year 1 and \$500 in subsequent years to cover laboratory consumables for mineral separation (glassware, heavy liquids, sample containers) and field related equipment (binoculars, shared cooking equipment, field notebooks, field tablet with GIS).

**2. Publication Costs** – We request \$1000 in years 2 and 3 to cover the costs of publication

**4. Computer Services** – We request \$2040/year for a main account (\$1740) and a secondary account (\$300) for the IBEST high performance computing clusters.

**6. Other Costs** – Analytical expenses for geochronology

Apatite (U-Th)/He dating: 30 samples from 3 transects at \$325 per sample for a total of \$ 9750 spread over years 1 and 2. Analysis at University of Colorado TRaIL.

AFT-UPb double dating and zircon U-Pb dating: Total \$23500. \$1900 per detrital AFT sample for 10 samples spread over years 1 and 2. \$900 for 5 zircon U-Pb samples to constrain stratigraphy in year 3. Analysis at GeoSep Services.

Mineral Separation: \$175 per sample for the 15 highest priority samples in year 1 for a total of \$2625. Student training rate at GeoSep Services.

Sample Shipping: \$150 per year to ship samples between labs.

Tuition, Fees and Insurance: Tuition and fees (\$4938/semester in 2020-2021 plus \$549 for 1 summer credit required for RAs) and insurance (\$951/semester in 2020-2021) for 3 years for a PhD student and 1 year in year 2 for a Master student. Projected 5% increase per year in tuition and fees included for a total of \$54279. Indirect costs are not applied to tuition, fees, and insurance. Additional time required for students to complete their degrees will be supported by UI teaching assistantships.

**I. Indirect Costs** – Indirect costs are assessed at a level of 47.5% on all direct costs except participant support, tuition, student fees, and insurance. Total indirect costs amount to \$92526 in indirect costs