

## **Budget Justification**

The University of Idaho is requesting funds to support 4 cadres/cohorts of 7 students each into our Cybercorps Scholarship for Service program starting academic year 2022-23, including 8 BS students, 8 BS+MS students, 10 MS students and 2 PhD students, totaling 28 students, consisting of 66 student years of support.

The University of Idaho has determined the salary year for senior personnel to be based on the calendar year.

- A. *Senior Personnel* (\$188,724). We are requesting support for the project PIs to be used to mentor students in the program (faculty meet with individual students weekly) in addition to the SFS seminar, manage student research and service projects, recruit students into the program, project and professional development, and overall project management. Dr. Haney is based at our Idaho Falls, Idaho campus and mentors our students based on that campus. Dr. Alves-Foss and Dr. Song are on the main Moscow, Idaho campus. Salaries are based on current AY 2021-22, assuming a 3% annual increase. We are requesting 0.5 months salary for the first project year as we wind down our current SFS grant with 0.5 months support each. We are then requesting 1 month support each for years 2-4- and 0.75 months support for the final in AY 22-23. For AY 22-23 we are anticipating monthly salaries for Dr. Alves-Foss (\$16,385.79), Dr. Haney (\$12,574.10) and Dr. Song (\$11,156.55).
- B. *Other Personnel* (\$161,921).
- *Other Professional*. We are requesting funds to support our program manager, CSDS Assistant to the Director, Ms. Arvilla Daffin, at 35% time for the life of the program. Estimated annual salary for AY 22-23 is (\$56,066.61). Ms. Daffin has been an integral part of our SFS program for 10 years and is considered the “SFS Mom” by the SFS students. She oversees the professional development aspects of the program providing resume and CV review and guidance, job search support, interview practice, mock interviews, mock job fair, manages the SFS peer mentors, attends all of the internal PI meetings, attends (and provides professional development instruction) in our SFS seminar (3 hours per week). She travels with the SFS students to the annual job fair, attending relevant NSF meetings, meeting with recruiters and assisting the students in navigating the job fair and travel. She also keeps in regular contact with recruiters and hiring managers, helping resolve recruitment issues, as well as arranging for travel to campus and finding and inviting guest speakers including, but not limited to former SFS students.
  - *Graduate Student*. We are requesting funds for one summer graduate student for each of the 4 summers in the middle of this program (506 hours at a rate of \$24 per hour). The student will assist in laboratory improvements and preparation between the academic years. We find that all courses need a regular refresh of labs, equipment and software need regular updates for our purpose-built security labs. This student will assist with these activities.
- C. *Fringe Benefits* (\$104,238). The University of Idaho uses a consolidated fringe benefit rate plan, negotiated with US. Department of Health and Human Services. For FY 22, the rate is

29.4% for faculty, 40.8% for other professionals (staff) and the intermediate help rate (student summer rate) is 8.6% during the summer.

- D. *Equipment (over \$5,000 per item)*. Not applicable.
- E. *Travel* (\$54,000). We are requesting annual travel funds to support faculty and staff travel to the annual SFS PI meeting (and job fair) (\$1,500 per person trip, two persons per year) and travel to conferences for professional development of faculty. We are estimating \$1,500 per conference trip (with conference registration fees falling under *Operating Expenses*). The request includes two conference trips for year 1, six for each of years 2-5.
- F. *Participant Support* (\$3,620,369). We are proposing to support four cohorts/cadres of students, seven new students each year for a total of 28 unique students, with 66 total student years of support. We have divided these students into several categories: (i) students who complete two years of support for a B.S. degree, (ii) students who complete three years of funding for a combined B.S. and M.S. degree, (iii) students who complete two years of support for an M.S. degree, and (iv) students who complete three years of support for a PhD degree. In addition, we categorize students as in-state (resident) or out-of-state (non-resident) for tuition purposes.

Based on recent experience with our students, we anticipate that the majority of the B.S. students will stay to complete their M.S. degrees. Based on recent experience, especially with the shortage of SFS schools in the Northwest, we anticipate that the majority of our graduate students will be recruited from out of state (specifically Montana, Oregon, Washington and Wyoming). We project a total of 12 in state students and 14 out of state students. Total student support per category is summarized in the following table.

Number and Type of Student Support Per Year						Total Unique Students
	AY 22-23	AY 23-24	AY 24-25	AY 25-26	AY 26-27	
B.S. in-state	1	3	3	4	3	7
B.S. out-of-state				1	1	1
BS+MS in-state	2	3	5	3	2	5
BS+MS out-of-state	1	2	3	2	1	3
MS in-state	1	2	2	2	1	4
MS out-of-state	1	3	3	3	2	6
PhD in-state			1	1	1	1
PhD out-of-state	1	1	1	1		1
<b>Total</b>	<b>7</b>	<b>14</b>	<b>18</b>	<b>16</b>	<b>11</b>	
<b>Unique New Students</b>	(7) 4 BS 2 MS 1 PhD	(7) 4 BS 3 MS	(7) 3 BS 2 MS 1 PhD	(7) 4 BS 3 MS	-	<b>28</b>

<b>Total Student Fees and Tuition by Student Type</b>					
	<b>AY 22-23</b>	<b>AY 23-24</b>	<b>AY 24-25</b>	<b>AY 25-26</b>	<b>AY 26-27</b>
Ugrad in-state tuition & fees	\$ 27,997	\$ 59,353	\$ 62,914	\$ 66,689	\$ 35,345
Ugrad out-of-state tuition & fees	\$ 13,604	\$ 28,568	\$ 29,996	\$ 31,496	\$ 16,536
Grad in-state tuition & fees	\$ 10,895	\$ 22,879	\$ 60,058	\$ 50,448	\$ 52,971
Grad out-of-state tuition & fees	\$ 68,909	\$ 145,651	\$ 192,415	\$ 162,688	\$ 128,958
Ugrad Stipend	\$ 100,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 100,000
Grad Stipend	\$ 102,000	\$ 204,000	\$ 340,000	\$ 272,000	\$ 238,000
Ugrad Prof Dev	\$ 24,000	\$ 48,000	\$ 48,000	\$ 48,000	\$ 24,000
Grad Prof Dev	\$ 18,000	\$ 36,000	\$ 60,000	\$ 48,000	\$ 42,000
<b>Annual Total</b>	<b>\$ 365,404</b>	<b>\$ 744,451</b>	<b>\$ 993,383</b>	<b>\$ 879,321</b>	<b>\$ 637,810</b>

Participant Support is calculated as follows and summarize in the preceding table. We assume a 5% annual in-state tuition and fee increase. We assume an annual 6% out of state tuition increase for graduate students. All tuition and fees include an estimated \$500 per year special course and lab fees for our required computer science and cybersecurity courses, or other required science and engineering special course/lab fees that students typically are charged. The total costs are based on the following:

- Annual undergraduate tuition and fees: estimated \$9,332 for AY 22-23.
- Out of state undergraduate fee (50% in addition to in-state fee): estimated \$13,604 for AY 22-23. Good students (3.2 GPA or higher) in one of 16 western states receive this Western Undergraduate Exchange (WUE) discount. We assume all of our out-of-state BS students will receive this discount.
- Annual graduate in-state tuition and fees estimated \$10,895 for AY 22-23. This applies to BS+MS students during their MS year.
- Annual graduate out-of-state tuition and fees estimated \$34,454 for AY 22-23. This applies to BS+MS students during their MS year.
- Annual undergraduate stipend \$25,000.
- Annual graduate stipend \$34,000 (this applied to BS+MS students during their MS year).
- Annual professional development for each student: \$6,000. This will be used for student travel to the annual SFS job fair, can be used for travel and attendance in cybersecurity conferences or competitions, individual research supplies, purchase of

student computers or laptop, paying for external cybersecurity certifications or other related professional development expenses as approved by the PIs.

- G. *Operating Expenses, Publication Costs and Research Supplies* (\$40,000). We are requesting funds to support conference registration fees (estimated to be \$500 per conference trip), publication costs at \$1,000 each (2 for year 1, 4 each for remaining years), and research supplies (software, equipment < \$5,000, lab components) at \$4,000 per year.

<b>Category</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
Conference Fees	\$1,000	\$3,000	\$3,000	\$3,000	\$3,000
Publication Costs	\$2,000	\$4,000	\$4,000	\$4,000	\$4,000
Research Supplies	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000
<b>Total</b>	<b>\$7,000</b>	<b>\$11,000</b>	<b>\$11,000</b>	<b>\$11,000</b>	<b>\$11,000</b>

- H. *Total Direct Costs* (\$4,180,251). The total direct costs include \$3,620,369 in participant support costs for 26 unique students over 62 student years of support. All other direct costs I support of program management, total \$561,991 which is less than the cap of \$660,000 (\$10,000) per student year support.

- I. *Indirect Costs* (\$279,944). The University of Idaho charges Facilities and Administration (F&A) fees on the Modified Total Direct Costs (MTDC) of the grant. As per our negotiation with US. Department of Health and Human Services, MTDC includes salary, fringe, travel and operating expenses supplies. For this project, MTDC does not include participant support costs. The rate approved by HHS for FY 23 (and projected for future years) is 50% of MTDC.