

Budget Justification

Senior Personnel (\$45,496)

PI - Dr. James Lathrop will serve as the Principal Investigator (monthly salary \$10,875) and is requesting 1 month of salary each year of the project. The year 1 amount is \$10,875, and an annual increase in salary is budgeted at 3% per year. Dr. Lathrop will be responsible for leading the project at Iowa State University.

Graduate Research Assistants (\$167,304)

Funding is requested to support one graduate student to participate in the proposed research at 50% effort for 12 months in years 1 and 2, and two graduate students in years 3 and 4. The year 1 stipend amount is \$2,200/mo, and annual increase in salary is budgeted at 3% per year. The year 1 salary is \$26,400. The graduate assistants will work jointly on most parts of the project and be aware of all parts of the project.

Undergraduate Research Assistants (\$30,121)

Funding is requested to support two undergraduate students each year for 3 months during the summer to participate in the proposed research. The year 1 expected salary for each student is \$3,600 (\$1,200/mo) for a combined total of \$7,200 in year 1 for both students. An annual increase in salary is budgeted at 3% per year.

Fringe Benefits (\$25,484)

Fringe benefits are requested at the current university rates of 27.3% for faculty, 7.7% for graduate students and 0.6% for undergraduate students. Fringe benefits are charged to an individual based on his or her labor category.

Travel (\$28,020)

The travel fund will be used to support the investigators and participating students to cover travel expenses associated with the collaboration between the three institutions: Iowa State University, Grinnell College, and Drake

University. The travel fund will also be used to cover travel expenses for reporting results of this research at major national and international conferences.

Domestic

2 people (PI and GRA) – Conference year 2, 3, and 4 (e.g., DNA, POPL, SPLASH, PLDI)
Airfare \$450 per person
Hotel/Per Diem 4 nights = \$800 per person
Conference Registration \$450 per person
Total Conference years 2, 3, and 4 \$3,400 per year \$10,200
Collaboration travel to Drake University and Grinnell College (Mileage 90 miles round trip (\$52) and meals two people \$28)
6 trips per year at \$80 per trip = \$480 per year
Total collaboration travel for all years \$1920
Total Domestic Travel \$12,120

Foreign

2 people (PI and GRA) – Conference year 2, 3, and 4 (e.g., DNA, ICFP, SPLASH)
Airfare \$1,400 per person
Hotel/Per Diem 4 nights = \$800 per person
Conference Registration \$450 per person
Total Foreign Travel \$15,900

Tuition (\$102,900)

Funding for tuition is requested for one Ph.D. student in years 1 and 2 of the proposed research, and two Ph.D. graduate students in years 3 and 4 of

the proposed research. Tuition is listed at the rates approved by Iowa State University.

Indirect Costs (\$157,105)

Iowa State University's DHHS negotiated on-campus indirect cost rate is 53% of total direct costs excluding equipment, tuition allowance, patient care costs, and subcontract amounts exceeding \$25,000.

Total Direct Costs:	\$399,325
Total Indirect Costs:	\$157,105
Total Project Cost:	\$556,430