Grand Forks Community College is requesting \$649,984 to support this four-year project.

Senior Personnel

Dr. Jess Button will serve as Principal Investigator (PI) for this project, requesting two weeks summer support for each year of the project with an estimated 3% annual salary increase in years 2-4. Dr. Button earned a Ph.D. in Organic Chemistry from the University of Florida and has been a faculty member in GFCC's Physical Sciences Department since 2012.

Dr. Barry Libra will serve as Co-PI, requesting two weeks summer support of each year of the project with an estimated 3% annual salary increase in years 2-4. Dr. Libra earned his Ph.D. in Analytical Polymer Chemistry from the University of Florida in December 1990. He has taught for over 30 years at the high school and college levels and has been a faculty member in the Physical Sciences Department of GFCC since 2011.

The PIs will be responsible for the overall performance of the project including project management, personnel management, operations, and reporting. In addition, they will be a key part of the mentoring team and play a lead role in interfacing with partner institutions of higher education and industry to create opportunities for students. They will oversee all student supports and co-chair the advisory team.

Year
$$1 = \$12,188$$
; Year $2 = \$12,554$; Year $3 = \$12,930$; Year $4 = \$13,318$

Other Personnel

This project has many facets and activities planned, therefore, the project team requires a student assistant for 5 hours per week at \$12 an hour year round for the entire project period. The student assistant will help with administrative work associated with booking activities, coordinating events, clerical work, data gathering, and other administrative tasks.

Year
$$1 = \$3,120$$
; Year $2 = \$3,182$; Year $3 = \$3,246$; Year $4 = \$3,311$

Fringe Benefits

Fringe rates are based on GFCC calculated rates and are as follows:

For the PI and Co-PI, the fringe rates are 7.65% for FICA; 26% for retirement; and 20% for health insurance calculated on annual base salary. For the student assistant fringe is 7.65% for FICA calculated on hourly wages.

Year
$$1 = \$7,558$$
; Year $2 = \$7,774$; Year $3 = \$7,997$; Year $4 = \$8,226$

Travel

<u>Ground transportation</u>: The project team will charter a bus each semester of this project to take students to university and employer visits. The cost of a bus charter is \$675 per trip and there will be seven trips.

<u>Mileage</u>: In order to coordinate activities and site visits the project team has budgeted \$928 for mileage. The rate is 0.58 a mile and team members will travel an estimated 400 miles per year to state universities, employer sites, and other organizations in support of the objectives of this project.

An important aspect of this project is advancing understanding and disseminating results. Therefore, funds are budgeted to allow the PIs to travel to professional conferences to discuss the project and present findings in years 2-4. Line items include airfare, hotel, per diem, ground transportation and conference fees for two attendees.

Year
$$1 = \$907$$
; Year $2 = \$5,812$; Year $3 = \$5,812$; Year $4 = \$5,812$

Participant Support

Scholarships: The project proposes three student cohorts supporting a minimum 35 unique students for two academic years over the 4-year grant period representing 65% of the budget. Current tuition rates at GFCC are \$114 (for in-district) and \$244 (out-of-district) per contact hour. The typical full-time STEM student at GFCC will take 18 contact hours. Therefore, per year, an in-district STEM student (75% of students) will pay about \$4,500 for tuition and lab fees and out-of-district student (25% of students) will pay about \$9,200. A weighted average of these amounts is \$5,675 per student per year. Students would also be eligible for aid to purchase books and supplies for their courses, bringing the projected total to the proposed amount of \$6,000 per student per year.

As new students begin the program, there will be cohort overlap from year to year. Total 2-year cohort support is as follows in the chart and yearly totals following the chart.

Cohort	Dates of Scholarship Support	Minimum Number of Students	Approximate Total Award Amount (based on \$6,000 per student/per yr)
1	January 2020–December 2021	8	\$ 96,000
2	August 2020–July 2022	14	\$ 168,000
3	August 2021–July 2023	13	\$ 156,000

<u>Student stipends</u>: Student stipends will be awarded with active participation in PEGASUS-coordinated or approved student support STEM events. In order to receive a stipend, students will be required to participate in at least four events per semester for every semester they are a PEGASUS scholar. They will receive the \$200 stipend at the end of the semester (fall/winter) if they have attended these events.

Materials and Supplies

A modest amount of general, project-specific supplies have been budgeted for each year of this project.

Year
$$1 = \$225$$
; Year $2 = \$100$; Year $3 = \$100$; Year $4 = \$100$

Consultants

External Evaluator: The evaluator for this project will assess progress toward completion of goals and objectives, gauge evidence of broader impacts, determine the efficacy of outreach efforts, and determine if changes to program implementation are warranted. The evaluator will conduct reviews of project documents, data and reports and provide the PIs and advisory team with evaluation-related technical assistance.

<u>Dr. Eliza Sand</u>, a Ph.D. in chemistry, will advise the PI team on transfer student efficiencies and barriers to transferring to a four-year college for community college students. She will serve as a consultant with the project team in-depth the first year of the grant on ways to maximize student success in these areas.

Year
$$1 = \$7,000$$
; Year $2 = \$5,000$; Year $3 = \$5,000$; Year $4 = \$8,000$

Other

<u>Promotion for recruitment</u>: In order to promote PEGASUS scholarships and to promote STEM activities for participants, the PIs will engage in outreach and promotion activities. Costs associated with these efforts include brochures, posters, digital communications, and materials associated with high school visits.

Student support activities: The PIs propose a number of activities to meet the objectives of this project. These include research presentations, annual field trips, campus visits to transfer institutions, service learning opportunities, employer site visits, videotaped mock job interviews, and an inquiry-based project.

Year
$$1 = \$3,200$$
; Year $2 = \$3,300$; Year $3 = \$3,300$; Year $4 = \$3,300$

Total Direct Costs

Year
$$1 = \$59,798$$
; Year $2 = \$178,522$; Year $3 = \$236,785$; Year $4 = \$125,268$

F&A

The GFCC facilities and administrative rate is federally negotiated and set at 52% on salary and fringe.

Year
$$1 = \$11,890$$
; Year $2 = \$12,225$; Year $3 = \$12,570$; Year $4 = \$12,925$

Total Direct and Indirect Costs

Year 1 = \$71,688; Year 2 = \$190,748; Year 3 = \$249,356; Year 4 = \$138,192

Total Amount of this Request: \$649,984