

Budget Proposal Narrative

2023 Strategic Budgeting Process

Please carefully review the [Call for Proposals](#) with particular attention to the evaluation criteria before beginning this application. Criteria should be addressed throughout the proposal narrative.

Section 1: Proposal Title and Department Contact

Proposal Title: **Meeting the Needs of Washington Citizens: Expanding Access for Pre-Healthcare Students**

Division: Academic Affairs

College/Unit: College of Science and Engineering, Departments of Biology and Chemistry

Department Contact: P. Clint Spiegel (Chemistry), Lynn Pillitteri (Biology)

Section 2: Proposal Summary and Problem Statement

Check the most relevant box (one selection only).

Priority Program and Service Areas:

- Graduate Programs
- Inclusive Student Success

Identified Structural or Legacy Funding Needs (to be used sparingly and in conjunction with Division VP)

- Core Infrastructure, Safety, and Regulatory Compliance
- Remaining funding needs from partially funded prior request
If checked, please identify original funding request amount and actual funding received in narrative section
- Other [Click here to enter text](#)

Statement of Purpose (One Page or Less):

What are the challenges or opportunities being addressed? How will the new investment(s) in this proposal address this challenge or opportunity? What are the expected outcomes if this proposal is funded?

This budget proposal establishes the infrastructure needed to increase the capacity for students interested in preparing for healthcare careers at WWU. **According to recent analyses, statewide employer demand significantly exceeds supply for numerous health occupations at all levels (middle, baccalaureate, graduate), all of which require substantive access to STEM college coursework¹.** In addition, the Covid19 pandemic has increased the interest nationally in pre-health majors (students

¹ Source: "[Washington's Skilled and Educated Workforce, 2021-2022](#)"; Washington Student Achievement Council, the State Board for Community and Technical Colleges, and the Workforce Training and Education Coordinating Board.

with pre-health attributes at WWU make up 7.6% of the total student body in Fall 2022; medical school applications increased by 18% nationally in 2021, the so-called 'Fauci Effect'). The projected healthcare provider shortfall will continue to be large among physicians and surgeons, with additional shortages predicted for many other healthcare careers that require an advanced degree, including physical therapy, pharmacy, and dentistry². These shortages are most pronounced in the rural areas in Washington State, resulting in exceptionally long vacancy times for positions; this shortfall is exacerbated by the median age of rural physicians being older than 55, as retirement for this population looms. To forestall this shortage of healthcare providers, the State has recently invested significant resources to increase the capacity for advanced degrees in allied health via commitments to WWAMI (UW) and by establishing the Elson S. Floyd College of Medicine at WSU, which opened in 2017. Compounding the general shortage of healthcare providers in the State, there is a **significant lack of healthcare practitioners who come from underrepresented groups**, a problem that many professional healthcare programs are actively working to address by recruiting, enrolling, and supporting applicants from diverse backgrounds³. The WWU student community this academic year is composed of 24% first generation students, 29% Students of Color, and 21% Pell grant-eligible (<https://wp.wvu.edu/sos/students/>), which makes WWU well positioned to help the needs of the state by producing diverse graduates who are prepared and ready to enroll in healthcare programs, **but we need additional resources promote student retention and make our programs equitable and inclusive**. Currently, pre-health students at WWU are limited by access to pre-health courses and overly strained advising resources. This proposal will provide more equitable access to critical pre-health courses and as well as additional advising resources for students, which has been shown to be a significant predictor of student retention for traditionally underrepresented groups⁴. Pre-health students at Western generally fall into one of two main categories: 1) those majoring in a discipline in which the degree requirements include most of the courses required for their professional aspirations, and 2) those majoring in other disciplines who take pre-health courses on top of their major requirements (there has not been a single degree at WWU that covers all the pre-requisites to apply to medical school until now). The quick rise in the number of students interested in pre-health careers and looming shortfall of healthcare providers requires that WWU improve both access and advising support for these students. Current staffing and space challenges cause many difficulties for these students including extended times to graduation due to course access in both Biology and Chemistry and lack of effective advising/guidance related to specific health-related careers. **The Biology and Chemistry Departments provide the majority of prerequisite coursework for pre-health preparation and are ready to meet the need for well-qualified and diverse people in allied health professions. In order to address emergent supply and demand discrepancies in both departments, we request 4 new tenure-track positions (2 in Biology and 2 in Chemistry), new technical, clerical, and professional advising staff, 2 new graduate TA lines in each department, and remodeling of lab and office spaces in both the Biology building and Morse Hall to accommodate these new hires.**

These steps will allow us to increase the enrollment capacity of specific bottleneck courses in Biology and Chemistry (BIOL 321-4, BIOL 345-6, CHEM 333, 471-4) that are currently limiting Western's ability to produce graduates ready to pursue careers in healthcare. One element of this proposal is to expand access to courses in Biology and Chemistry that are taken by students in a wide array of pre-health pathways, and the other is to provide a more streamlined degree path (new Biochemistry BA

² "A Skilled and Educated Workforce" pp. 18-20.

³ Source: "The Power of Collective Action: Assessing and Advancing Diversity, Equity and Inclusion Efforts at AAMC Medical Schools"; Association of American Medical Colleges, Nov 2022.

⁴ Journal of the Scholarship of Teaching and Learning, 19 pp 61-76. 2019

degree) for meeting pre-medicine and other allied healthcare career requirements. We project that the newly developed Biochemistry BA will increase the total number of Biochemistry graduates by 50%; given that both the Biology and Chemistry programs have a supply vs. demand discrepancy during the major admission process, expanding major seats plays a critical role in fostering inclusive excellence in these programs. **The Biochemistry BA degree also has the intended effect of allowing community college transfer students to complete a comprehensive, cross-disciplinary degree related directly to pre-healthcare coursework in two years once enrolled at WWU, representing a sustainable 2+2 degree pathway for this increasing population of WWU students.**

Summary of Proposed New Investments:

Summarize the new investments included in this proposal (total monetary amount, number of FTE and type of positions, and other expenses). Explain the need for any goods and services or professional contracts.

New Investment Summary:

FTE: 8, \$744,922 Recurring, \$700,000 One-time

4 Tenure-track assistant professors (2 each for Biology and Chemistry Depts)

2 Instructional/Classroom Support Technicians (1 each/dept)

0.5 Program Assistant (Chemistry Dept)

0.5 Fiscal Technician (Chemistry Dept)

1 Healthcare Professional Advisor (Career Services)

- The tenure-track faculty lines are requested to 1) provide increased teaching support for bottleneck courses that are critical for many allied health programs, 2) provide increased access for pre-health students in independent research opportunities in both Biology and Chemistry, and 3) increase general pre-health faculty advising capacity for students.
- Classroom and instructional support technicians (1 each/dept) are requested to support the anticipated increase in student enrollment in both Biology and Chemistry. These support staff are absolutely required in order to maintain a rigorous and safe classroom laboratory environment that come with increasing the number of majors in each department.
- The Healthcare Professional Advisor is requested to help provide a wide range of services (finding clinical experiences, mock interviews, individual advising, etc) that will be needed with the anticipated increase in students interested in pre-health careers. Effective advising strongly influences retention of underrepresented students and WWU pre-health advising is critically understaffed (2 advisors).
- The office and fiscal support positions (0.5 Program Asst, 0.5 Fiscal Tech) are requested to ensure sustainable operations for the Chemistry Department. Currently, there is no front-facing office staff person to interface with students entering the department office. Our program coordinators actively advise students and perform myriad administrative duties, such as working with Banner and organizing/coding teaching schedules and other department business. The fiscal tech support would ensure a sustainable workflow for purchases, payroll and travel. The Chemistry Department operates an NSF-funded REU program that brings students to campus from other institutions each summer (just funded for a fourth three-year round, employs over 80 WWU students for summer research activities, and has an external award

budget over \$3M that includes the purchasing of scientific equipment, student and faculty travel, and the aforementioned payroll.

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Graduate Student Support: 4 TAs, \$96,307 Recurring

2 GTAs/dept

Departmental Student Summer Support (\$24K/year)

- Graduate student teaching assistantships and summer support is requested to allow for an increase in graduate student enrollment in both departments. Graduate students play a critical role in supporting both upper and lower division laboratory courses and provide peer mentorship and training for undergraduates in independent research labs.

Department Operations: Biology/Chemistry Dept Operating Budget Increase, \$60,000 Recurring

\$30K increase/dept

Infrastructure/Remodeling: \$3,300,000 One-time

Morse Hall: remodeling of CB 210/220 for four offices and research lab spaces

Biology Building: remodeling of BI 258/350/336/338 for research lab and office space.

Impact of New Investment on ADEI and Sustainability:

Please provide data or an analysis to support this request and illustrate the anticipated impact of this investment, including in advancing accessibility, diversity, equity, inclusion, and sustainability.

Over the past few years, Biology has been able to accept only 60-70% of the total applicants to their majors; Chemistry has been able to accept 70-80% of the total applicants to their Biochemistry majors (with applications matching enrollment max only seen in 2022). While we have admission processes in place that serve to provide inclusive enrollment, having to limit enrollment in both Biology and Chemistry due to faculty and staffing is explicitly exclusive.

There are substantive shortages in healthcare professionals in Washington State, at the middle collegiate, baccalaureate, and graduate levels. At the middle collegiate level, Washington State had a supply of 4,569 qualified individuals for 18,949 open positions; at the baccalaureate level, there was a supply of 3,000 qualified graduates for 6,824 open positions; at the graduate level, there was a supply of 1,908 qualified graduates for 4,510 positions. There is already a clear need for more diverse representation in the healthcare workforce and reducing the barriers that limit students from achieving success in pre-health majors⁴. This need will only grow as Washington State demographics broaden and may more particularly impact rural, underserved areas where there are long vacancy times for open positions and over half of the practicing physicians are over 55 years old.

Nationally, AACN and AAMC-accredited medical schools report that that nearly 100% of schools utilize a holistic admissions process that stresses the need and the importance of improving diversity in

⁴ The importance of Diversity and Inclusion in the Healthcare Workforce. J Natl Med Assoc. pp247-249 2020

medical and nursing programs. Similarly, Physician Assistant, Dentistry, Pharmacy, and Genetic Counseling programs all promote holistic admissions practices that will promote a meaningful and sustained impact on student diversity that better reflects the general population. Further, many allied health programs and schools now monitor their admissions procedures for potentially exclusionary practices. Thus, the American allied health education system is primed to accept more qualified applicants from underserved and/or underrepresented communities; it is critical for WWU to meet the needs of Washington state and the nation by investing in an inclusive enrollment infrastructure for pre-healthcare careers. Currently, UW only accepts 13.2% of its total applicants of Washington state residents.

Section 3: Performance Outcomes and Risk Mitigation

Expected Outcomes and Evaluation of Success:

Please explain how the success of the proposal will be measured, if funded. What metrics might indicate that the intended impact was achieved? How can the expected outcomes be directly tied to the investment being proposed?

Specifically, provide the targets and explain which method(s) will be used to track progress (refer to the Provost's [Overall Metrics to track progress toward University's Strategic Plan](#)), estimated return on investment (such as enrollment increases or efficiencies), divisional KPI's, recruitment and retention especially specifics for historically marginalized populations.

We will directly measure most of the outcomes. For example, the increased number of students in the Biochemistry and Biology majors, as well as the number of seats in supporting pre-health courses. We will also assess student demographics for pre-health students and Biology/Chemistry majors as a function of more seats/sections available in Biology and Chemistry courses. We expect this investment would increase the number of graduates from Biology and Biochemistry majors by 40-50 students/year, concomitant with an increase in diversity of our students.

Impact on Recruitment, Retention, and Satisfaction of Diverse Faculty, Staff, and Administrators:

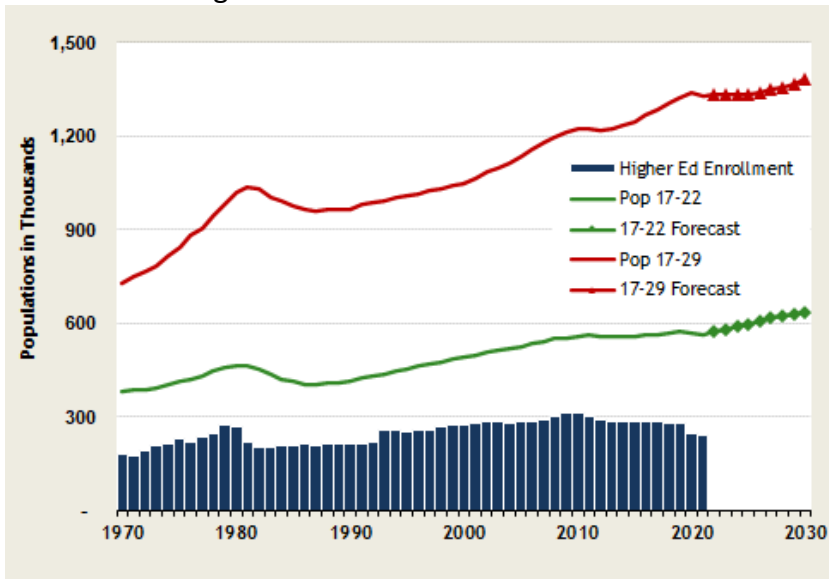
For proposals that include personnel resources, explain how the proposal improves recruitment, retention, and satisfaction of diverse faculty, staff, and administrators.

We expect the retention of historically excluded students from pre-health coursework and majors. We expect this to occur from (1) hiring faculty that are trained to support a diversity of students, (2) more sophisticated and culturally conscious advising of pre-health students, and (3) a larger and more diverse pre-health community that will reduce the experience of isolation and increase peer support.

Risk to Desired Outcomes:

What might occur to prevent the desired outcomes even if funding is obtained? How will these risks be mitigated? Beyond new funding, what other criteria or external factors need to occur in order for this proposal to be successful (e.g., economic or demographic factors, etc.).

The only substantive risk we face is a potential reduction in overall enrollment based on current population numbers. With that said, projections from the Washington State Office of Financial Management projects a steady increase in the 17-22 age population, which should result in a similar increase in college enrollment:



[WA Public Higher Education Enrollment Analysis](#)

We assert that enrollment trends in both STEM and pre-health will remain the most robust on WWU’s campus during the years that predict less students attending college. Other external factors that need to occur, outside of this proposal, is a compensation model for faculty and staff that is coherent with the high cost of living in Whatcom County. We also expect a continued investment in the inclusive success teacher training program in SMATE to keep our instructors informed on best practices for student-centered, inclusive instructional practices.

Anticipated Consequences if Proposal is Not Funded:

What are the anticipated consequences of not funding this proposal?

In recent years, the Biochemistry major and all Biology programs have been unable to accept many of the qualified students that applied to each major. Without the ability to increase capacity, we expect the trajectory of interested student to result in our programs turning away as much as 50% of the qualified and interested students in the next few years (to provide clarity, this equates to ~100-150 total students that must find another major, each year). These are students that have prepared for a major and now must change course. This greatly elevates the stress on our students, compromises their health, increases their time to graduate, decreases their probability of graduating with a degree, increases the resources needed to support and advise students. All of these are counter to WWU’s goals and commitment to WA citizens. In addition, although both departments are working hard to address equity and inclusion in our departments, limited access to our majors represents a huge conflict with this aspect of our mission. We are nearly certain to see a large increase in the number of students interested in pre-health (outlined above), and therefore majors in Biology and Chemistry. We

need to address this demand to serve the citizens of Washington, and fulfill our commitment to improving equity, inclusion, and diversity at WWU.

Section 4: Process and Development

Describe Collaborations and Stakeholder Engagement:

What stakeholders were involved, and in what role/capacity? Which groups were engaged and at what stages? How were concerns addressed? What process have you followed to identify unintended consequences that may result from this proposal? Is the issue being addressed a broader issue across the university?

Biology and Chemistry Departments have regularly discussed their respective needs at the college and university levels. Prior initiatives have been put forward in the form of internal budget requests (such as two years ago) and decision packages. The Pre-healthcare Advising group in Career Services has provided feedback on pre-health-interested student trends.

Explain how this proposal will leverage resources or commitments from other sources:

Identify any current resources in place, any new commitments, or potential funding partnerships with external entities that have been identified. If exploration is currently underway, note any conversations with university development officers, funding agencies, the Vice Provost for Research, etc.

The Biology and Chemistry Departments have been active in engaging with local area industry with the intent that such businesses invest in our student success. For example, we have recently received gift funds to support undergraduate summer research experiences with a particular emphasis on broadening the diversity of students who have access to such opportunities. Leveraging the success of this program, and others like it, to garner additional institutional support.

Has your department previously submitted this proposal?

If so, briefly outline any significant changes and indicate the feedback received during that budget process.

This proposal was submitted two years ago and was not approved for funding. Here, we have adjusted the budget rationale to more closely fit what is needed for sustainable enrollment and success of our students who are pursuing healthcare careers. With the opening of the Interdisciplinary Sciences Building (ISB) and the approval of our new Biochemistry BA degree, the Biology and Chemistry Departments are now immediately ready to address these enrollment pressures through investment by WWU in this proposal, but hiring initiatives and space remodeling is required to do so. Some renovations for Biology were put high on a priority list, but will not be funded based on budget restraints.

Describe any funding alternatives that have been explored.

Note both alternative approaches in addressing the problem, as well as alternatives to new funding (repurposing existing divisional funding or one-time fund use). If these alternatives are not being pursued, explain why.

An earlier proposal was developed to support pre-healthcare at WWU through the Decision Package mechanism, which was supported by WWU to be submitted to Olympia. Elements of that proposal were combined with other initiatives to support the STEM Access initiative that resulted in the construction of the ISB. However, most of the funding requested in the pre-healthcare proposal were not realized.

Section 5: Fulfillment of WWU's Strategic Plan's Core Themes and Goals

Please explain how your proposal and the anticipated outcomes will advance the Core Themes and Goals of [WWU's 2018-2025 Strategic Plan](#) and the strategic priorities set for this budget cycle. How does this allocation or withdrawal of funding advance or hinder access to Western, academic excellence, and/or inclusive achievement?

Core Themes

Advancing Inclusive Success

- Promotes greater equity and inclusion in STEM by 1) increasing capacity in biochemistry, which is capped (32 students/year) below the demand for the degree program in recent years (there were almost 50 applicants for those 32 spots in 2020, >100 in 2021), 2) increasing course and research capacity in Biology and Chemistry to support prehealth-interest students across all majors, and 3) reducing time-to-degree for students interested in healthcare professions. Increased access is a critical way to help address inequities caused by institutional racism and discrimination.
- Creating a larger and more diverse community of pre-health student by increasing the expertise of faculty and advisors that can support a more diversity student body
- Strengthening professional pre-health advising to help students that require guidance to plot their course to success (there has been a net decrease in advising support at WWU for the last 5 years).

Increasing Washington Impact

- Increases Western's ability to serve the needs of the state by contributing to the education and training of future health care professionals.
- Increases Western's engagement in solving health-related issues facing our state and society.
- Provides improved options for pre-health students at Western, giving them more flexibility in pursuing degrees that align with their academic interests without jeopardizing their aspirations for a career in healthcare.

Enhancing Academic Excellence

- Fosters a new B.A. Biochemistry degree with a shorter path to completion than the current B.S. Biochemistry degree; specifically, creates a viable 2-year degree completion option for transfer students with an interest in postgraduate healthcare programs.

- Expands more inclusive participation to pre-health majors and increases access to high-demand STEM courses for the campus community.
- Provides clear paths to high demand professional careers.

Goals

Western will provide a transformational education grounded in the liberal arts and sciences and based on innovative scholarship, research, and creative activity.

The strategic hiring of more tenure-track faculty, along with space remodeling to foster their independent, student-focused scholarship will result in more undergraduate research opportunities for our students. Currently, over half the majors in the Chemistry Department are biochemistry majors, but there are only five research-active faculty members whose expertise is biochemistry. Similarly, only three faculty in the Biology Department have research training in directly associated with health-related issues. Concisely put, the demand for research opportunities greatly exceeds the supply of positions in a sustainable, meaningful manner.

Western will advance a deeper understanding of and engagement with place.

Remodeling of Biology and Chemistry building spaces will lead to better student engagement and sense of place. Currently, several NTT Chemistry faculty have offices that are outside of Morse Hall. In the Biology Department, several NTT faculty share a common suite, which is not conducive to sensitive student interactions in office hours. Hiring a new cohort of faculty with the specific intent to prioritize teacher-scholars who are culturally conscious and training in ADEI best practices will also lead to a deeper understanding of our students' needs.

Western will foster a caring and supportive environment where all members are respected and treated fairly.

- turning away qualified students from majors, major-restricted courses, and research opportunities does not treat them fairly or with respect.
- keeping certain faculty members siloed in separate buildings, or cramped in a common office suite does not treat them, or their students, fairly or with respect.
- strategic hiring initiatives paired with remodeling existing building space will immediately address these inequities at WWU.

Western will pursue justice and equity in its policies, practices, and impacts.

The Biology and Chemistry Departments are committed to conducting our business through the lens of justice and equity, however, to meet the student needs with our current resources is not realistic or sustainable. Both departments have invested heavily in diverse hiring practices and inclusive teaching approaches. We review our faculty for such efforts with sincerity and substance.

Section 6: Space Planning, Capital, and Maintenance Considerations

Major Equipment of Software Needs

If the proposal includes new major equipment or software (>\$25K), please indicate its anticipated useful life, and associated operating costs such as service contracts or annual licenses.

No equipment or software needs for this proposal.

Space or Infrastructure Upgrades

Do you believe new space, space modifications, or infrastructure upgrades will be required? If so, please provide the following as best you can.

Please note that Capital Planning and Development will review and evaluate the request after the proposal is submitted to determine options.

Scope:

Space modifications and infrastructure upgrades are needed in both Morse Hall and the Biology Building:

Morse Hall:

Currently, we have 4 NTT faculty who have offices in Carver Gym because we simply do not have any places to put them in our own building (NTT are already at double occupancy for their offices). The opening of the ISB will alleviate some of our office space woes in the short-term, but we'll immediately be filled to capacity yet again when these NTT faculty return to our department. Thus, we have proposed a four office/research lab remodel in order to immediately hire four more TT faculty. These labs that need remodel are large, open spaces that already have some HVAC capabilities. In our remodeling plan, we would need:

- completely enclosed office spaces (4) and minor remodel to the office in CB 200A in order to have an external door
- removal of laboratory benches and cabinetry in CB 210/220 to be replaced by research-appropriate lab benches, storage, and working hoods (Currently, each lab has two hoods and lots of minor hoods for teaching lab spaces)
- removal of lab benches and storage in CB 210A with student desk space replacements
- new entrance doors to CB 210/220
- potential remodel of CB 200 in order to create 2-3 more office spaces for faculty/staff

Benefits of these renovations

- Allows for an increase in our graduate student capacity
- Creates additional office spaces in Morse Hall for an increase in qualified instructors (TT and NTT) to increase access to our major.
- Creates additional research labs to hire faculty and increase research opportunities for pre-health majors.

Biology Building:

With the move of BIOL 101 (non-majors course) to ISB, we have the ability to renovate BI 258, along with additional shared spaces, BI 336, 338, and 350, to create up to 3 research spaces and up to 8 faculty offices to accommodate new TT faculty and reduce the number of our NTT faculty needing to

share office space (up to three to an office currently). Freeing up the NTT offices will allow for expansion of graduate students into those spaces with moderate changes and increases in cubicle and desks. Overall, the changes to current spaces will help to increase capacity for the major. In our remodeling plan, we would need:

- Remove cabinetry, fume hood, HVAC, and sinks from BI 258 and add walls, doors, short access hallway, and flooring to create faculty offices. .
- Wall removal between BI 336 and 338 as well as new cabinetry to produce one research lab.
- Add walls, door, and flooring to create new faculty office, BI 352.
- Add cabinetry, fume hood, sinks, etc. to convert BI 350 into a faculty research lab.
- Change door type and install reclaimed sink to replace facility loss in BI 350
- Widen door frame into BI 353A to allow specialty equipment installation

Benefits of these renovations

- Allows for an increase in our graduate student capacity
- Creates additional office spaces in BI 258 for an increase in qualified instructors (TT and NTT) to increase access to our major.
- Creates additional research labs to hire faculty and increase research opportunities for pre-health majors.

Square Footage:

Morse Hall: 3,500-4,000 sq. ft.

Biology Building: 2,300-2,700 sq. ft.

Cost for capital component:

Biology Building: \$1,100,000

Morse Hall: \$2,200,000

(based on 2022 WWU Project Proposal Checklist)

Changes to the Use of Existing Space

If existing space is being repurposed, explain how the proposed activities will be accommodated within existing space. For how long? Who will need to approve the proposed new use of this space?

With the opening of the ISB, present spaces in the Biology Building and Morse Hall are available for permanent remodel to office and research lab spaces without compromising other essential WWU business and/or activities.

Incorporation of Physical Accessibility and Cultural Inclusion

For proposals that include capital development or IT infrastructure, please explain how physical accessibility and cultural inclusion (beyond statutory requirements) will be resourced as foundational elements of project development.

All new spaces will be planned to be remodeled to be ADA-compliant. Currently, several of our existing lab spaces are not. However, an overall increase in research lab spaces will immediately make a positive impact on the accessibility of research spaces for all students.

Proposal Title: Meeting the Needs of Washington Citizens: Expanding Access for Pre-Healthcare Students

Division: Academic Affairs

Department: College of Science and Engineering, Departments of Biology and Chemistry

Department Contact: P. Clint Spiegel (Chemistry), Lynn Pillitteri (Biology)

| Salary and Benefits | Description | Fiscal Year 2024 | | | | | Fiscal Year 2025 | | | | |
|---|-----------------------------------|------------------|------------------|------------------|------------------|--------------------|------------------|----------------|----------------|----------------|----------------|
| | | FTE | Salary | Benefits | One-Time Costs | Total | FTE | Salary | Benefits | One-Time Costs | Total |
| Faculty Positions | 4 TT faculty/dept (Chem, Biol) | 3.00 | \$300,000 | \$116,430 | \$700,000 | \$1,116,430 | 3.00 | 300,000 | 116,430 | \$0 | 416,430 |
| Professional/Exempt Positions | 1 professional pre-health advisor | 1.00 | \$68,841 | \$28,095 | \$0 | \$96,936 | 1.00 | 68,841 | 28,095 | \$0 | 96,936 |
| Classified Positions | 2 ICST4, 1 program assistant | 3.00 | \$143,178 | \$88,377 | \$0 | \$231,555 | 3.00 | 143,178 | 88,377 | \$0 | 231,555 |
| Student Salaries (Graduate Assistants, Hourly Student, etc) | 4 GTAs (2/dept) | 8.00 | \$88,000 | \$8,307 | \$0 | \$96,307 | 8.00 | 88,000 | 8,307 | \$0 | 96,307 |
| Total Salaries and Benefits | | 15.00 | \$600,019 | \$241,210 | \$700,000 | \$1,541,229 | 15.00 | 600,019 | 241,210 | \$0 | 841,229 |

| Non-Personnel Expenses | Description | Units | Price per Unit | Recurring Costs | One-Time Costs | Total | Units | Price per Unit | Recurring Costs | One-Time Costs | Total |
|--|--|-------|----------------|-----------------|--------------------|--------------------|-------|----------------|-----------------|----------------|-----------------|
| | | | | | | | | | | | |
| Professional Service Contracts | | | | | | \$0 | | | | | \$0 |
| Other Goods and Services, Memberships, etc. | | | | | | \$0 | | | | | \$0 |
| Travel | | | | | | \$0 | | | | | \$0 |
| Other | | | | | | \$0 | | | | | \$0 |
| Capital Facility Expenses (New Space or Space Modifications) | Remodeling of Morse Hall, Biology Building | | | | \$3,300,000 | \$3,300,000 | | | | | \$0 |
| Total Non-Personnel Expenses | | | | \$60,000 | \$3,300,000 | \$3,360,000 | | | \$60,000 | \$0 | \$60,000 |

| University Indirect Costs | Description | Include? | | Recurring Costs | One-Time Costs | Total | Recurring Costs | One-Time Costs | Total |
|--|--|----------|--|------------------|----------------|------------------|------------------|----------------|------------------|
| | | | | | | | | | |
| Academic Support Services/Student Support Services | 3% of Recurring Direct Costs | YES | | \$27,037 | \$0 | \$27,037 | \$27,037 | \$0 | \$27,037 |
| Institutional Support | 2% of Recurring Direct Costs | YES | | \$18,025 | \$0 | \$18,025 | \$18,025 | \$0 | \$18,025 |
| Plant Operation and Maintenance | 3% of Recurring Direct Costs | YES | | \$27,037 | \$0 | \$27,037 | \$27,037 | \$0 | \$27,037 |
| Graduate TA Waiver | Input amounts for new TA Positions | YES | | \$68,400 | \$0 | \$68,400 | \$68,400 | \$0 | \$68,400 |
| Total Indirect Costs | | | | \$180,498 | \$0 | \$180,498 | \$180,498 | \$0 | \$180,498 |

| Total Proposal, All Direct and Indirect Costs | FTE | Head Count | Recurring Costs | One-Time Costs | Fiscal Year Total | FTE | Head Count | Recurring Costs | One-Time Costs | Fiscal Year Total |
|---|-----|------------|-----------------|----------------|-------------------|-----|------------|-----------------|----------------|-------------------|
| | | | | | | | | | | |