UNIVERSITY of WASHINGTON

206874 Chemical Sciences Building

University of Washington Architectural Commission August 12, 2024



Welcome

Introductions

UW Facilities Project Delivery Group Contacts:

- Sydney Thiel, Project Manager, sydthiel@uw.edu
- Jeannie Natta, Director of Major Projects, jnatta@uw.edu

Client Contacts:

- Steve Majeski, Senior Associate Dean for Research & Infrastructure, College of Arts & Sciences
- Dan Pollack, Divisional Dean of Natural Sciences
- Munira Khalil, Chemistry Department Chair
- Paul Miller, Chemistry Administrator



Agenda

- 1. Problem Statement
- 2. Project Parameters: Goals, Scope, Budget, Schedule
- 3. Target Program and Campus Integration
- 4. Designer Selection Process & Guidance



Problem Statement

UW's Chemistry Department faces serious limitations due to aging facilities that cannot keep pace with the demands of modern scientific practice:

- Dispersed program model limits collaboration opportunities
- Small lab configurations + constrained wet-lab instruction lack HVAC control and flexible interdisciplinary lab space
- Aging infrastructure pose critical safety/security issues
- Bagley Hall (1937) + Chemistry Library (1957) do not meet requirements for cuttingedge research in the chemical sciences limiting new discoveries and training opportunities for students.





Chemistry Library

Bagley Hall

UNIVERSITY of WASHINGTON

Project Parameters

Project Goals



- **[student/faculty growth and retention]** Increase degree production through recruitment and retention of excellent graduate students and faculty resulting in an expansion of class offerings and hands-on research training opportunities.
- **[interdisciplinary colocation]** Increase grant funding and new interdisciplinary discovery through a more efficient collocated environment.
- **[modernization/optimization]** Optimize space by 15% through implementation of efficiencies, modernization, and economies of scale
- **[synergy/interdependence between research & classroom]** Capitalize on synergy and interdependence between research and classroom by creating an environment that drives innovation and research that feeds what is taught in the classroom.

......





- The new Chemical Sciences Building will replace the Chemistry Library Building
- Enable a new mode of science where fundamental chemical research can transform into real-world applications in real time.
- Provide unique opportunities for education and discovery for undergraduate and graduate students in interdisciplinary chemical sciences research
- Enhance recruitment of faculty and graduate students
- Requires proximity to the existing Chemistry Building (CHB) and Bagley Hall with nearby interdisciplinary research centers such as MoIES and NanoES.

Project Budget & Schedule

TOTAL PROJECT BUDGET	\$191,000,000
Design-Build budget	\$146,750,000
Owner soft costs	\$ 43,250,000
Predesign expenses	\$ 1,000,000

FISCAL YEAR 23/25 Biennium 25/27 Biennium 27/29 Biennium 1 CALENDAR YEAR 2023 2024 2025 2027 2026 2028 Chemical Sciences (\$190M) Predesign Predesign CPAT Phase II Submission (Jan. 2024) \$5М FY24 Supplemental Request - Design \diamond BOR Informational (May 2024) BOR Approval (June 2024) DB Team Selection **DB** Team Selection Design & Permitting phase Design & Permitting 25-27 Capital Request - Construction X \$125M Enabling Enabling Work & Demolition Construction Construction Occupancy (May 2028) $\mathbf{\star}$

WE ARE HERE

Substantial Completion

Spring 2028

Program

Target size: 100,000 – 110,000 gsf 4 stories + basement





- Research High Performing Labs
- 24 research groups



LO3 - Office and Research

- Connecting Bridge to Bagley Hall
- West facing General Lab+Support
- East Facing Offices
- Open Workstation
- Breakout Rooms
- Conference Room

LO2 - Office and Research

- West facing General Lab+Support
- East Facing Offices
- Open Workstation
- Breakout Rooms
- Conference Room
- Communicating Stair

L01 - Office and Research

- West facing General Lab+Support
- East Facing Offices
- Open Workstation
 Breakout Rooms
- Conference Room
- Conference Room
 Communication Sta
- Communicating Stair

Ground Floor

- Active Learning Classroom and Adjacent Pre-function
- Adjacent Pre-function
 Interior Public
- Thoroughfare with bilevel lobby
- Multipurpose Room
 Open Workstation

Basement Floor

- 18 High Performance Lab+Support
- Open Workstation
- Break Room
- Loading
- Mechanical Space

excerpted from Predesign Report prepared by Perkins & Will, June 2024



Preserve and Strengthen the Historic Core

Respect and integrate with the collegiate character of Central Campus' historic core.

Create Connections

Create, clarify and amplify legible connections and Universal Access between Rainier Vista and Drumheller Fountain with Stevens Way, South Campus, and West Campus

Prioritize a Campus-First Design

Design the building and site to prioritize the pedestrian experience. Maximize pedestrian arrival and campus experience whole thoughtfully locating/minimizing vehicular access and service.

Embody Pacific Northwest Character

Amplify the lush, evergreen, Pacific Northwest character that draws people to our region and the UW. Facilitate the unique place-specific relationships between people, plants, animals, insects, and other organisms.

Lead on Sustainability including use of long-term sustainability strategies and infrastructure investments

Cluster of Excellence create a chemical science cluster of excellence and interdisciplinary research

Exemplary Project Benchmarks

Architect: Payette



Frick Chemistry Laboratory(link)Princeton University265,000 gsfopened 2011

- Architecture promotes unique collaboration
- Use of daylight and transparency to foster innovation
- Proven record of hiring top chemistry talent after new building was completed

Architect: Ballinger



New Chemistry Building (link) University of Maryland 105,000 gsf opened 2024 34 research labs

- Purposely built for faculty and students to share ideas
- Interdisciplinary building with high-performance labs for quantum information science + flexible space for analytical and chemical biology research

Architect: HOK



Heathcock Hall (link)Berkeley, College of Chemistry80,000 gsfin construction

- Designed to promote advanced research and education
- Attract rising leaders in chemistry

UNIVERSITY of WASHINGTON

Designer Selection Process & Guidance



Design-Build Team Selection

Process and Schedule



Architect Selection



Step 1a: Develop "long list" of architects

• Prepared by Slating Committee for preliminary guidance from UWAC

Step 1b: Invited Solicitation via D-B

SOQ Evaluation Committee

- Design Builder Member(s)
- Kristine Kenney, CAP Director
- Steve Majeski, Sr. Assoc. Dean, CAS
- Paul Miller, Chemistry Administrator
- Jeannie Natta, PDG Director
- Sydney Thiel, PDG PM

Shortlist 3 firms to advance to step 2.

Step 2a: Interview Phase

Slating Committee (input to be shared with UWAC):

- Design Builder Member(s)
- Kristine Kenney, CAP Director
- Munira Khalil, Chemistry Department Chair
- Steve Majeski, Sr. Associate Dean, CAS
- Jeannie Natta, PDG Director
- Dan Pollack, Divisional Dean of Natural Sciences
- Sydney Thiel, PDG PM

Step 2b: UWAC Interviews

- December 2
- UWAC recommendation issued to VP of UWF for approval

Project Goals & Basis for Architect Qualifications

PROJECT GOALS:

[student/faculty growth and retention]

Increase degree production through recruitment and retention of excellent graduate students and faculty resulting in an expansion of class offerings.

[interdisciplinary colocation] Increase

grant funding and new interdisciplinary discovery through a more creative and efficient collocated environment.

[modernization/optimization] Optimize

space by 15% through implementation of efficiencies, modernization, and economies of scale

[synergy/interdependence between

research & classroom] Capitalize on synergy and interdependence between research and classroom by creating an environment that drives innovation and research that feeds what is taught in the classroom.

PRELIMINARY LIST OF DESIRED ARCHITECTURAL QUALIFICATIONS:

A portfolio of Design Excellence that demonstrates:

- architecture with a strong visual presence
- ability to create integrated campus connections
- flexible and collaborative lab layout to enable chemistry of the future

Higher Ed, Complex Lab Experience

- wet labs with stringent HVAC requirements, and vibration isolation
- understanding of laboratory design efficiencies
- intentional design strategies that facilitate crossdisciplinary collaboration

Experience creating welcoming and equitable learning environments

- promote access, opportunity, and justice for all
- foster reciprocal learning between research and classroom

Design-Build experience & team fit

Architecture Firms' Interest to Date

23 Firms have expressed interest.

Seattle-Area/Local Representation

- Cannon Design*
- CollinsWoerman + SmithGroup (Portland)
- DLR Group* + Tsoi Kobus (Boston)
- Gensler*
- EHDD* + Payette (Boston)
- Hewitt + Herzog & de Meuron (Switzerland)
- HOK*
- Integrus* + Ennead (NYC)
- LMN*
- Miller Hull* + RFD (San Diego)
- Mithun* + Lord Aeck Sargent (Atlanta)
- Perkins & Will* (perfomed Predesign Study)
- SkB Architects + Research Workplace (Boston)
- Skidmore Owings & Merrill*
- ZGF*

* indicates additional office presence beyond Washington State

UWAC Feedback Requested by Fri 8/23:

- Top 10 firm recommendations
- Cautionary guidance (if any)

West Coast

- AC Martin (Los Angeles)
- Carrier Johnson +Culture (San Diego)
- CO Architects (San Diego/LA)
- Grimshaw (Los Angeles)
- Moore Ruble Yudell (Santa Monica)
- Studio Gang (San Francisco, Chicago, NYC)

National

- Anderson Mason Dale (Denver)
- Kieran Timberlake (Philadelphia)

Other Firms/Potential Consideration

• **Ballinger** (Philadelphia) Designed the New Chemistry Building at University of Maryland (precedent project, slide 11)

Discussion

For more information, the Predesign Report, prepared by Perkins & Will (June 2024) is linked here:

206874 CSB Predesign Report_FINAL

Letters of Interest from Architects are available here: Letters of Interest - July 2024

If you experience problems with access to the files above, please contact Project Manager, Sydney Thiel at sydthiel@uw.edu



Thank you!