THE GRADUATE SCHOOL
UNIVERSITY of WASHINGTON

December 13, 2023

To: Dianne Harris, Dean, College of Arts & Sciences
Daniel Pollack, Divisional Dean of Natural Sciences, College of Arts & Sciences

From: Joy Williamson-Lott, Dean of the Graduate School
Kima Cargill, Associate Dean for Academic Affairs, Graduate School

RE: Review of the Department of Chemistry (2022 – 2023)

This memorandum outlines the Graduate School's final recommendations from the Department of Chemistry academic program review. Detailed comments on the review can be found in the documents that were part of the following formal review proceedings:

- Charge meeting between review committee and administrators (September 22, 2022)
- Self-Study (January 5, 2023)
- Site visit (January 30-31, 2023)
- Review committee report (February 9, 2023)
- Department of Chemistry response to the report (March 8, 2023)
- Graduate School Council consideration of review (October 19, 2023)

The review committee consisted of:

- Cheryl R. Kaiser, Professor, Department of Psychology, University of Washington (Committee Chair)
- Mo Li, Professor, Department of Electrical & Computer Engineering and Department of Physics, University of Washington
- Catherine J. Murphy, Professor, Department of Chemistry, University of Illinois at Urbana-Champaign
- F. Fleming Crim, Emeritus Professor of Chemistry, Department of Chemistry, University of Wisconsin-Madison

The Department of Chemistry offers the following degree programs:

- Bachelor of Science in Biochemistry
- Bachelor of Arts in Biochemistry
- Bachelor of Science in Chemistry (ACS Certified)
- Bachelor of Science in Chemistry
- Bachelor of Arts in Chemistry
- Minor in Chemistry
- Master of Science in Applied Chemical Science and Technology (MSACST)
- Doctor of Philosophy in Chemistry

Daniel Pollack, Divisional Dean of Natural Sciences in the College of Arts & Sciences and Munira Khalil, Professor and Chair of the Department of Chemistry attended a Graduate School Council meeting to

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discuss outcomes from the review. The Council reviewed all documents from the review prior to the meeting. A summary of the review documents and the Graduate School Council discussion are attached to this memo.

Graduate School Council Recommendations

The Graduate School Council commends the Department of Chemistry on the strength of its programs, faculty, and students. After discussion, the Council recommended the following:

- Full academic program review in 10 years (2032-2033)

We concur with the Council's recommendations.

cc: Tricia Serio, Provost and Executive Vice President for Academic Affairs
Patricia Moy, Associate Vice Provost for Academic and Student Affairs, Office of the Provost
Jason Johnson, Vice Dean, Undergraduate Academic Affairs
Jackie Belanger, Director, Libraries Assessment and Planning, University of Washington Libraries
Munira Khalil, Professor and Chair, Department of Chemistry
Review Committee Members
GPSS President

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Attachment

Summary prepared by the Graduate School Director of Academic Program Review

Overall Review Committee Recommendation:
Continuing status for all programs, with the next full review in 10 years.

Summary of Review Committee Report:
In its report, the review committee stated the following:

- The Department of Chemistry is an outstanding department, composed of world class scholars conducting innovative research that is advancing their field. Over the last two decades, the department has made singular advances that have improved its standing nationally.
- The department leads numerous nationally funded multidisciplinary research centers which create strong connections across the university.
- The department offers high-quality undergraduate education that serves an enormous number of undergraduates both within the major and across the university.
- The department runs a large PhD program and recently introduced a master's program – students are receiving strong training preparing them for careers in chemistry.
- Staff, students, and faculty praised the department chair for transformational leadership and vision.
- Bagley Hall is unsuitable for chemical research; research infrastructure is a real and present threat to the continued excellence of the department. Instrumentation is barely hanging on, temperature shifts create a building that is physically unsafe for its occupants. The state of the building harms graduate recruitment, faculty recruitment and retention.
- The committee applauded the College of Arts and Sciences for prioritizing the Department of Chemistry for a new building and making an initial investment in a pre-design phase. The renovation should include phasing that supports upgrades to the Chemistry Building so that it is up to modern standards.
- The committee identified several "university-wide problems" affecting the department, including lack of adequate paid parental leave, eldercare policies, lack of spousal hiring program and broken faculty salary system creating salary compression.
- It is not clear how stronger wages for graduate students and postdocs will be supported as current grants did not budget for it.
- Staff and faculty reported being stretched too thin.

Summary of Unit Response
In its response to the report:

- The department agreed with the review committee's assessment of Bagley Hall and the Chemistry Library Building and acknowledged that the College of Arts and Sciences has prioritized a new building and invested in a pre-design study and made a commitment of $40M for the construction phase.

- The department indicated it will work to prioritize instrumentation needs, identify faculty who can lead equipment grants, and seek strategic federal funding opportunities.
- The department highlighted that the committee endorsed the department's proposed size of tenure-track and teaching track faculty.
- The department stated that its graduate program advisor serves a much higher ratio of students than other science and engineering units and asserted that additional advising staff support will be crucial.
- The department agreed with the review committee's assertions about parental leave and spousal hiring.
- The department committed to working to build long-term relationships with URM students to increase the diversity of applicant pools at graduate, postdoc and faculty levels, also noting that endowment funds have been set aside to send a few students to meetings of national chemistry organizations focusing on DEI.
- The department indicated plans to build on a program, which it started in FY 22, to allocate funds for stipends for undergraduate researchers to participate in research with Chemistry faculty and graduate students.
- The department highlighted that it values long-term staff and will continue to advocate for competitive staff salaries, professional development, team-building and social activities.
- The department noted a review committee suggestion to appoint a faculty member as an associate chair for DEI and Community Building. The department would prefer to hire a full-time staff member but will explore the associate chair model.

Summary of Graduate School Council Meeting on October 19, 2023

The Graduate School Council discussion of this review included the following key topics:

- *Facilities:* The department and the college both acknowledged the review committee comments about the need for facility improvement. The department sees its facilities as a safety risk. The college expressed strong support for the need to address the issues in Bagley Hall, noted it has actively worked with the department for the past three years, and reiterated that this is the top capital priority for the college.
- *Faculty size:* The Council asked for follow-up comment on the topic of department faculty size, which was referenced in the review committee report. The department expressed a belief that its ideal faculty size is 40 tenure-track and 8 teaching-track faculty, and that additional TA funds are needed. The college agreed and expressed a desire to reach those goals in the future, especially with a new facility and the potential for growth. Currently, resources allow for steady-state maintenance of faculty size.