



December 10, 2022

Office of Academic Affairs  
Loew Hall  
Box 352191  
Seattle, WA 98195-2191

Dear Academic Program Review Team:

I am writing in response to the Review Committee Report for the Biochemistry program review. We greatly appreciate the many positive statements. I will address each section in turn. At the end of this narrative, I have included a summary of direct responses.

### **Departmental strengths**

I thank the reviewers for the positive comments about my leadership. They state that the recruitment and retention of new faculty have been a particular success and I agree. We have hired 14 junior faculty members to replace those who have retired or left. This has dramatically diversified our faculty. In 2009 we had 21 faculty members, 20 white and 1 Asian, 4 were women. With two new hires this year, we will have 22 faculty members including 3 Asians, a Pacific Islander, 2 Latina, and 2 LGBTQ+. Ten of the 22 are women, particularly notable in a STEM field.

Thank you for the recognition of our increased funding, publication, and scholarly impact, which has occurred because of the successes of our junior faculty and the growth and success of the Institute for Protein Design. Thank you for noting the environment of collegiality, for which I am also grateful.

### **Institute for Protein Design (IPD)**

The development of the Institute for Protein Design into a global powerhouse is a major success to be credited to all of those involved. As the reviewers state, obtaining sufficient space to ensure the IPD's future success and accommodate its growth has been a constant battle. A successful process that resulted in the University's commitment to a new building (W27) appeared to have solved this problem. Unfortunately, the test fits recently done revealed that because of the design of the space (in the shape of the state of Nevada rather than "L" shaped like MoIES/NanoES), that an equivalent amount of space in W27 cannot be used as effectively as the space in MoIES/NanoES. We are exploring options. An additional 8,000-15,000 square feet more than the currently allocated 37,000 square feet are needed. As the reviewers state, it would be disgraceful for power struggles to seriously disrupt the progress of the IPD.

The reviewers pointed out the challenges in maintaining IPD as an integral part of the Department. Toward this end, as the reviewers suggested, we are providing access to the IPD space in MoIES/NanoES to all Biochemistry graduate students and have invited all Biochemistry graduate students to the monthly IPD happy hours.

The reviewers also point out the difficulty in managing funds flow from indirect costs. Unbeknownst to the reviewers, an agreement was already in place for the flow of indirect costs between the department and IPD labs. This has now been formalized into a memorandum of understanding. All royalties and equity disbursements from IPD companies have been used towards start up packages for 3 new faculty. The Director of the IPD, and I are in discussions about the use of future royalties.

### **Graduate Program**

Thank you to the reviewers for recognizing that our graduate program is going exceptionally well, and our students are remarkably successful. Graduate education has been important part of our mission since 1950. Student governance is impressively strong, and the students deserve enormous credit for sustaining this commitment to governance even as individuals come and go. As recommended by the reviewers and allowed by COVID policies, we have resumed in-person

student seminar series. Also as suggested by the reviewers, the President of the Graduate Students and I have worked together to invite non-academic scientists to come speak to the students. Two have come so far to resounding success, and two more are planned for the rest of the academic year (see below).

- Tim Fessenden, PhD – October  
Scientific Editor  
Journal of Cell Biology  
*Publishing*
- Megan Wargacki, PhD, JD – November  
Senior Counsel, Office of Program Research  
House Education Committee, Washington State Legislature  
*Policy*
- Crystal Stanfield  
Director of Talent Acquisition  
Allen Institute  
*Non-profit*  
\*Crystal is the contact person at Allen, but I anticipate the chat to be with someone else at Allen.
- Lina Dahlberg, PhD  
Associate Professor in Biology, Western Washington University  
*PUI*

I agree with the reviewers that the Associate Director of Graduate Studies is one of the clear strengths of our program and would add that she has shown an incredible commitment to the program and our students. She is exceptional. As suggested by the reviewers and despite a difficult labor market, we have hired an assistant to help her.

Students expressed two concerns over training opportunities: the teaching experience clerkship and that faculty teach their own research in the Literature Review course. We discussed both at our faculty meeting in October. It was discovered that one of the TA clerkship classes had not been taught effectively last year although it was taught well the year before. All faculty recommitted to the teaching clerkship course. One faculty member has developed new materials and offered them to all others. In terms of the Literature Review course, I have also observed that faculty often teach their own papers, which is not the intent of the course. I have asked faculty not to do so and asked the head faculty of each course to strongly discourage this practice.

The reviewers identified a serious issue with the formal faculty oversight of the graduate program. This, I believe must stem from a misunderstanding. Since I became chair, the department has had a Graduate Education Committee with four faculty members. The Graduate Program Coordinator (a faculty member) has chaired this committee for decades and a junior faculty member became the assistant chair several years ago. In his years as chair, the Graduate Program Coordinator has been very effective at helping students resolve difficult issues. In response to the reviewers, the Graduate Program Coordinator, the assistant chair to the Graduate Education Committee, the Associate Director of Graduate Studies, and I met to discuss ways to further strengthen the committee. We agreed that the Associate Director of Graduate Studies would become an ad hoc member. We agreed that we would give the other two members of the committee more visibility to the students. Although they have been active members of the committee for years, it is clear the students did not know that. See further discussion on this topic below under “Mentoring.”

### **Diversity, Equity and Inclusion Committee**

I thank the reviewers for recognizing the recent successes of the departmental DEI committee. In terms of the work being “tacked on” other work, it is standard in our department to take on a heavier

administrative burden upon promotion to tenure. I met with faculty to address this concern. One faculty member has applied for a sabbatical for next year and will take a break from departmental committees during sabbatical. I adjusted the assignments of another faculty member. I review faculty committee assignments annually and make every effort not to overload faculty.

In terms of formalizing the committee work, the DEI committee is in the process of strategic planning as is appropriate for a leadership committee of this type. A budget was provided as recommended. I should also note that trainees are already members of the committee. The student members are elected each year and the postdoc members volunteer. The department would be pleased to fund faculty attendance at SACNAS and ABRCAMS to join the Associate Director of Graduate Studies and a large UW contingent who go every year.

## **Mentoring and Collegiality**

### *Faculty*

As the reviewers suspected, in a discussion in a faculty meeting in November, some junior faculty members stressed that they liked having an informal mentoring structure and did not want our policy enforced. However, two issues were raised in that discussion that we will address. First, our current formal mentoring has focused on faculty within the department acting as mentors. This might lead to the uncomfortable situation of asking for help from someone who will vote on your tenure. Therefore, we will assemble a list of faculty members outside our department who are willing to provide mentoring. These will include our adjunct faculty. The second issue is that we recently formalized an onboarding to introduce faculty to the administrative aspects of the department (hiring, terminations, grants, budgets, etc.). This training was praised but was also described as “drinking from a firehose.” Therefore, in addition to the initial training, we will institute an additional training at 6 months. Of course, our administrative staff are always available to answer questions and prioritize customer service, but if one doesn’t remember who does what, it is difficult to find quick answers.

In response to the request for the chair of A&P committee to extend her mentoring efforts to Associate Professors, she has initiated an annual meeting with Associate Professors to talk about the process of promotion to Professor. It should be mentioned that I have a formal meeting with Associate Professors every other year and discuss this exact topic although those meetings were suspended for one year because of COVID. Of course, I often meet informally with the faculty.

Finally, we have restarted our in person Faculty Lunch series. This is a special time for faculty to gather and talk about science. We have also restarted our Departmental Happy Hours.

### *Students*

As discussed above, the Graduate Education committee has had four faculty members for decades, with the Graduate Program Coordinator serves as chair and another junior faculty member serves as assistant chair. However, clearly some students are unaware even of the Graduate Program Coordinator. This is true even though he, the assistant chair to the Graduate Education Committee and I participate in both recruitment and orientation where we discuss our roles extensively. I think the fact that these events were done on zoom for two years, probably decreased their effectiveness. This year, fortunately we returned to in person orientation, and I believe this year’s first year students know who we are and how we can help them.

We do commend the students on starting and organizing their buddy system. We have provided them with a budget to pay for buddy events. As mentioned above, the students have sustained their governance system for over 50 years, and we have made it our policy to advise but not steer their efforts.

### **Institutional Commitment**

The department received substantial support to recruit new faculty members and to purchase and develop the Arnold and Beckman Cryo-EM Center. The IPD also received substantial support, both financial and administrative, to get started and raise funding. We are grateful for this support.

As discussed by the review committee, once the initial funds I received for faculty start-up packages as chair were spent, our department struggled to find funding to hire additional faculty into our tenure lines. IPD royalties and disbursements partially alleviated this need. We also benefitted from a joint recruitment with the Institute for Stem Cell and Regenerative Medicine and the Provost's Research Initiative Fund. However, the source of funding for future faculty hires remains uncertain.

As the review committee states, our educational mission is dramatically underfunded. Although we instruct approximately 800 undergraduate students a quarter in 10 undergraduate courses during the academic year, we receive no funds for teaching assistants in stark contrast to departments in the College of Arts and Sciences. The lack of funding to support teaching activities has led the departments in the School of Medicine with undergraduate teaching obligations to develop a teaching experience clerkship program. As part of their educational requirements, our graduate students take two quarters of the teaching experience clerkship where they gain training and experience in teaching. Departments in other schools and colleges would instead hire 8 TAS per quarter to the tune of \$300,000 in salary and benefits per year. I think our training program is strong and should continue but with the flexibility provided by additional funding.

In addition, we pay an undergraduate and graduate advisor in our department, a portion of an undergraduate advisor in Chemistry and 3 reader-graders per quarter. We also pay for supplies and equipment for the undergraduate lab course. For these efforts, we receive a small budget of \$67K to cover \$280K of expenses.

Finally, we pay the first nine months of salary and benefits for our first year graduate students from other departmental resources (~\$250K per year).

As the reviewers state:

"Given the extensive commitment of Department faculty and graduate students to undergraduate teaching, it is unconscionable that funds must be redirected from other sources in the Department to facilitate these efforts."

In conclusion, I would like to thank the review committee and the program review office. This process has been particularly helpful for recognizing strengths and areas to improve and for identifying our constraints due to lack of institutional support for our educational mission.

Sincerely,



Trisha N. Davis, Ph.D.  
Professor and Chair of Biochemistry  
Earl W. Davie/ZymoGenetics Endowed Chair in Biochemistry

TL;DR

A list of direct responses to the review

### **Institute for Protein Design**

1. We already had a plan in place for the flow of indirect costs and we have now formalized it into an MOU.
2. The Director of the IPD and I are in discussions about the flow of royalty funds, all of which have been used to hire new faculty.
3. We are giving all Biochemistry graduate students access to the IPD in MoES and NanoES and have invited them to the IPD monthly happy hours.

### **Graduate Program**

1. Graduate student seminar program is going strong in person with lunch paid for by the Department
2. An additional staff member has been hired for the front desk and to help the Associate Graduate Program Director
3. We have invited two non-academic scientists to speak in the student seminar series. Two more will be invited in the rest of the academic year.
4. We discussed as a faculty how to improve the TA clerkship. All faculty committed to continuing to use this time to train students in teaching methods.
5. I have asked the faculty not to teach their own papers in the literature review course and asked the head faculty in those courses to enforce that request.
6. The review committee misunderstood how we staff our graduate program. (There already are 4 faculty members on the Graduate Education committee.) However, we implemented methods to make sure the graduate students know who is on the Graduate Education Committee.

### **DEI Committee**

1. I discuss committee assignments with all faculty members regularly. I initiated more discussions with the DEI committee members and adjusted their assignments as they requested.
2. I have asked the DEI committee to discuss how to formalize appointments.
3. I have provided the DEI committee with a budget.
4. Graduate trainees are already part of the DEI committee and are elected to one year terms by their peers.
5. Postdocs volunteer for the DEI committee.

### **Mentoring and Collegiality**

1. We are developing a list of possible mentors outside of our department, who would not be involved in the tenure decisions.
2. The chair of the Advancements and Promotions Committee has initiated an annual meeting with Associate Professors to discuss promotion to Professor.
3. We have strengthened our faculty onboarding by the admin staff and will follow up after 6 months.
4. The Graduate Education committee is revitalizing.
5. The Buddy program has been provided funding.
6. Our faculty lunches have restarted.
7. Our departmental happy hours have restarted.

### **Institutional Commitment**

1. The source of funding for future faculty hires is uncertain.
2. We desperately need funds for our educational mission.
3. Whereas departments on main campus receive \$100,000s to fund TA-ships, we receive nothing even though we teach 800 undergraduates per quarter and 10 courses a year.

4. We pay advising staff in Chemistry, but we receive no funds to pay our own staff who run our graduate and undergraduate programs. We also pay 3 reader/graders per quarter.
5. We receive limited funds to provide supplies and equipment for our undergraduate biochemistry lab course.
6. Our educational costs to cover items #4 and #5 are \$280K per year and we receive \$67K.
7. We also pay the first nine months of the salary and benefits for graduate students (~\$250K) from other departmental resources.
8. As the reviewers state:  
“Given the extensive commitment of Department faculty and graduate students to undergraduate teaching, it is unconscionable that funds must be redirected from other sources in the Department to facilitate these efforts.”