



**SOUTH DAKOTA BOARD OF REGENTS  
ACADEMIC AFFAIRS FORMS**

**Institutional Program Review  
Report to the Board of Regents**

<b>UNIVERSITY:</b>	SDSU
<b>DEPARTMENT OR SCHOOL:</b>	Department of Chemistry and Biochemistry
<b>PROGRAM REVIEWED:</b>	Biochemistry, Chemistry, and Chemical Education
<b>DATE OF REVIEW:</b>	2/21/2018-2/23/2018
<b>TYPE OF REVIEW:</b>	Institutional Program Review

**University Approval**

*To the Board of Regents and the Executive Director: I certify that I have read this report, that I believe it to be accurate, and that it has been evaluated and approved as provided by university policy.*

\_\_\_\_\_  
President of the University

Click here to enter a  
date: 10-30-2018  
Date

**1. Identify the program reviewers and any external accrediting body:**

Program reviewers:

- Michael Ashby, University of Oklahoma, chemist and expert in graduate education
- Polly Hulme, SDSU College of Nursing, institutional (Academic Affairs Committee) representative
- Marilynne Stains, University of Nebraska – Lincoln, expert in chemical education
- John Tanner, University of Missouri – Columbia, expert in biochemistry

Certifying/Accrediting Body:

- American Chemical Society (degree certification)
- American Society for Biochemistry and Molecular Biology

**2. Items A & B should address the following issues: mission centrality, program quality, cost, program productivity, plans for the future, and assessment of progress.**

**2(A). Describe the strengths and weaknesses identified by the reviewers**

Overall, the panel was very impressed with the DCB, especially in the context of the competition it faces with respect to regional HEIs for fairly restrictive human and financial resources. The undergraduate teaching program appears to be first-rate, modern, and the faculties that support that mission are impressive. The graduate program is equally impressive. It is clear that the DCB is advancing/adapting at a rate that is commensurate with available resources. Particularly impressive are the

collegiality of the faculty, the research/teaching facilities, and the level of average extramural funding.

**2(B). Briefly summarize the review recommendations**

The panel placed an emphasis on making recommendations that are intended to optimize more efficient use of resources, and on addressing the growing pains that are natural when departments develop new programs and directions. While many observations and recommendations are made, with this Executive Summary, the panel wishes to punctuate two critical issues that require redress: 1) the compensation/support of graduate students and 2) ameliorating divisive and/or unproductive policies and procedures. The first issue threatens to undercut the core mission of the SDSU to serve South Dakota. The second issue threatens what the panel perceives to be a primary strength of the DCB, collegiality between its personnel (faculty and students) and the steep trajectory of growth of research in the DCB. Policies that do not require financial investment are relatively easily addressed, but the first issue does not fall into that category. The panel wishes to emphasize that these issues are the result of growing pains, and not because SDSU or the DCB has been ineffectual. Indeed, the issues are a direct result of the DCB's efforts to respond to their own aspirations as well as those of the administration.

**2(C). Indicate the present and continuous actions to be taken by the college or department to address the issues raised by the review. What outcomes are anticipated as a result of these actions?**

Section IV of the reviewer's report lists five "umbrella issues and recommendations." In general, considerations of the comments provided by the external review team will help shape the Imagine 2023 Strategic Plan crosswalk currently under preparation by the department. The specific overarching issues are being addressed as follows:

1. Communication. (a) Communications with the administration and all levels of faculty and staff was also identified in the University's recent Campus Climate Survey and is being addressed via actions with the administration. (b) The Department Head is a member of the transition team leading to the creation of the proposed College of Natural Sciences and expresses faculty concerns in that forum. It will be recommended that representative faculty from each of the impacted programs participate in the search committee for the permanent dean. (c) An ad hoc faculty committee is being established to review the Department Standards Document, especially relative to differences and treatment of chemistry and biochemistry faculty. It is anticipated that any recommendations from this committee will be discussed for approval by the entire faculty at the year-end faculty meeting, with a revised Standards Document in place for the 2018-2019 academic year. (d) According to department policy, each new faculty member is assigned a teaching mentor and a research mentor. Using materials available from the SDSU Center for the Enhancement of Teaching and Learning, the department head will recommend for acceptance by the faculty a statement of best practices and expectations to more formally develop this mentoring program. (e) Biochemists and chemists both have representation on the Department Promotion and Tenure Committee and therefore have input on third-year reviews and applications for promotion and tenure. Annual reviews utilize the Department Standards Document, so the revision discussed previously should address input on the annual review process.

2. Contracts. (a) Requests for extension of the “tenure clock” are routinely handled at the College and University and should not be an issue. Significant recent turnover in academic leadership at these levels assure us that these requests are handled appropriately. (b) The discrepancy noted by the review team concerning the appointment length of graduate assistantships is an artifact of the wording in the standard offer letter. Wording has been added to provide clarity.

3. Financial/Benefit Support. (a) Salary policy, employee classifications, and related items are beyond the responsibilities of the department. These concerns have also been expressed in the Campus Climate Survey and are being evaluated administratively. (b) Financial resources are not available to address graduate stipend levels, time of guaranteed support, and health insurance. We are evaluating what are the norms established in the Oklahoma survey, fees assessed by our peer institutions, and discussing available means, such as requesting increases in the discipline fee, to address these concerns.

4. Resources. (a) The concern expressed relating to graduate student recruiting visitations has been shared with the College of Natural Sciences department heads and a conversation relative to this is underway. (b) The Department Graduate Program Committee has been charged with investigating best practices relative to graduate education in the molecular sciences and will offer recommendations for consideration by the full faculty at the May or August 2018 faculty meetings. (c) There are no barriers to the establishment of a shared equipment room. The biochemistry faculty and department facilities manager have been charged with creating such a resource.

5. Divisive Policies and Practices. (a) Regarding differences in practices in the chemistry and biochemistry programs, see 4(b) above. (b) Regarding expectations of chemistry and biochemistry faculty, see items 1(c) and 1(e) above.

