SAINT LOUIS UNIVERSITY.

Program-Level Assessment: Annual Report

Program Name (no acronyms): Anatomy	Department: Center for Anatomical Science and Education (CASE)
Degree or Certificate Level: PhD Degree	College/School: School of Medicine
Date (Month/Year): 1/24	Assessment Contact: John Martin

In what year was the data upon which this report is based collected? 2022-23

In what year was the program's assessment plan most recently reviewed/updated? 2023

Is this program accredited by an external program/disciplinary/specialized accrediting organization or subject to state/licensure requirements? No

If yes, please share how this affects the program's assessment process (e.g., number of learning outcomes assessed, mandated exams or other assessment methods, schedule or timing of assessment, etc.):

1. Student Learning Outcomes

Which of the program's student learning outcomes were assessed in this annual assessment cycle? (Please provide the complete list of the program's learning outcome statements and **bold** the SLOs assessed in this cycle.)

Last year the Anatomy PhD program underwent University Academic Program Review (APR) that included review by two external reviewers. Since the entire program underwent comprehensive review and assessment, no specific student outcomes were assessed in 2022 as every aspect of the program was the subject of APR.

2. Assessment Methods: Artifacts of Student Learning

Which artifacts of student learning were used to determine if students achieved the outcome(s)? Please describe the artifacts in detail, identify the course(s) in which they were collected, and if they are from program majors/graduates and/or other students. Clarify if any such courses were offered a) online, b) at the Madrid campus, or c) at any other off-campus location.

For the purpose of APR, the Anatomy Academic Program Review Committee prepared 62-page self-study of all Anatomy programs, including the PhD degree program, discussing both strengths and weaknesses of all aspects of the PhD program.

3. Assessment Methods: Evaluation Process

What process was used to evaluate the artifacts of student learning, and by whom? Please identify the tools(s) (e.g., a rubric) used in the process and **include them in/with this report document** (please do not just refer to the assessment plan).

External reviewers used this document and the information collected during their on-site visit to prepare their Academic Program Review document.

4. Data/Results

What were the results of the assessment of the learning outcome(s)? Please be specific. Does achievement differ by teaching modality (e.g., online vs. face-to-face) or on-ground location (e.g., STL campus, Madrid campus, other off-campus site)?

The executive summary of external reviewers' comments on the PhD program is pasted below:

We were invited to review St Louis University's Center for Anatomical Science and Education (CASE) on April 3rd and 4th, 2023. We appreciated the well-structured visit and ample opportunities to meet with administration, faculty, and students. Below is a brief summary of our primary findings with more details in the subsequent sections which follow

the rubric that was provided. Recommendations are noted at the end of the document.

Strengths

1. Students in all programs have an opportunity to participate in dissection-based anatomy courses taught at a very high professional level (see section I-10)
2. CASE leadership (see section V-1)
3. Faculty and PhD student dedication to teaching (see sections I-4, II-1, and III-3)

Challenges and Opportunities

1. Faculty teaching load that limits opportunities for faculty and student scholarship (see sections II-2 and II-3), while expectations for promotion are still based on research activity (II-1)
2. Faculty development and intramural funding opportunities for CASE faculty are limited and could be expanded to encourage faculty to engage in various types of scholarly activities (see section II-2)
3. PhD Student professional development (particularly research methods and career advisement) within existing curriculum could be expanded (see sections I-4, I-7, and III-2)

5. Findings: Interpretations & Conclusions

What have you learned from these results? What does the data tell you? Address both a) learning gaps and possible curricular or pedagogical remedies, and b) strengths of curriculum and pedagogy.

CASE has identified the following steps to address concerns identified in the external review process.

1. Expand on research footprint and productivity of CASE faculty.
2. Expand on research training of PhD students and faculty through further development of journal club and/or seminar series.
3. Submit justification to SOM administration for additional faculty positions to begin faculty recruitment in order to better serve academic and research needs of PhD students.
4. Investigate research collaborations within the SOM as part of PhD student training.
5. Examine admissions requirements for PhD program.
6. Begin a curricular review during AY 2023-2024.
7. Consider implementation of an “exit interview” for PhD students.

6. Closing the Loop: Dissemination and Use of <u>Current</u> Assessment Findings

A. When and how did your program faculty share and discuss the results and findings from this cycle of assessment?

The CASE self-study document in addition to the external review document and a document containing the CASE response to external reviewers, which was written by representatives from CASE staff and faculty, were distributed to faculty for their review. Some of these items were discussed directly at faculty meetings. Recently, a letter from the office of the Provost assessing our external review, and the CASE response, was shared with CASE faculty during a faculty meeting.

B. How specifically have you decided to use these findings to improve teaching and learning in your program? For example, perhaps you’ve initiated one or more of the following:

Changes to the Curriculum or Pedagogies	• Course content • Teaching techniques • Improvements in technology • Prerequisites	• Course sequence • New courses • Deletion of courses • Changes in frequency or scheduling of course offerings
Changes to the Assessment Plan	• Student learning outcomes • Artifacts of student learning • Evaluation process	• Evaluation tools (e.g., rubrics) • Data collection methods • Frequency of data collection

Please describe the actions you are taking as a result of these findings.

NOTES:
CASE Journal club was restructured to incorporate more research training. Two PhD level ANAT courses were restructured to strengthen and emphasize research related activities.

If no changes are being made, please explain why.

N/A

7. Closing the Loop: Review of <u>Previous</u> Assessment Findings and Changes

A. What is at least one change your program has implemented in recent years **as a result of previous assessment data**?

Critical analysis of research manuscripts and the ability to communicate those scientific details in an oral presentation were areas for growth based on recent assessment reports. Training on reading/interpreting manuscripts and presenting research findings was implemented in the Fall semester during ANAT-5200 (Human Embryology).

B. How has the change/have these changes identified in 7A been assessed?

Student course evaluations of ANT-5200 were generally positive regarding the research paper presentations. Several students commented that the presentations provided them an opportunity to learn how to critique papers and to summarize concisely important points and to acquire some background information and context to the lecture material. They also commented that they learned skills on how lead a discussion and how encourage class participation.

C. What were the findings of the assessment?

Student critical thinking and presentation skills are continually evaluated by faculty, though not formally, and faculty report progress on these fronts as students progress through the curriculum.

D. How do you plan to (continue to) use this information moving forward?

We will continue to utilize this procedure in ANAT-5200 moving forward and may expand the effort to other courses such as ANAT-5100 Human Histology and Ultrastructure.

IMPORTANT: Please submit any assessment tools (e.g., artifact prompts, rubrics) with this report as separate attachments or copied and pasted/appended into this Word document. Please do not just refer to the assessment plan; the report should serve as a stand-alone document. Thank you.