

## Program-Level Assessment: Annual Report

Program Name (no acronyms): Pathology

Department: Pathology

Degree or Certificate Level: Ph.D.

College/School: Medicine

Date (Month/Year): 02/2023

Assessment Contact: Jacki Kornbluth

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

In what year was the program's assessment plan most recently reviewed/updated? 2021

Is this program accredited by an external program/disciplinary/specialized accrediting organization? Yes

### 1. Student Learning Outcomes

Which of the program's student learning outcomes were assessed in this annual assessment cycle? (Please list the full, complete learning outcome statements and not just numbers, e.g., Outcomes 1 and 2.)

Students will demonstrate a competency in the basic biochemical, molecular, cellular and organismal aspects of the biomedical sciences.

Students will generate a research proposal.

Students will apply research skills which include data collection, publications, and oral presentations.

Students will integrate and apply communication and research skills through oral presentations at scientific seminars, conferences, and other venues.

Students will have knowledge of responsible conduct in research.

### 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 and identify the course(s) in which they were collected. Clarify if any such courses were offered a) online, b) at the Madrid campus, or c) at any other off-campus location.

The grades and overall performance of the students are evaluated through their courses, research presentations, and participation in discussions. They prepare a grant proposal, which is evaluated by a faculty committee, and give an oral presentation. None of the courses are online, at the Madrid campus, or at any other off-campus location.

### 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).

Students develop hypothesis-driven research proposals using an NIH pre-doctoral proposal format under the supervision of two course-masters and two advisors who work individually with the student. This is a required course for Pathology graduate students and is offered by the Department of Pharmacology and Physiology. As students prepare their proposal, they receive feedback from the course masters and advisors. The students receive written critiques that cover the following evaluation criteria: Idea and Critical Thinking, Presentation, NIH Style Critique (Overall Impact, Significance, Approach). Students respond to these critiques by submitting a revised proposal which is graded by a five-person committee. Receiving a passing grade is equivalent to passing the written preliminary exam and allows the student to progress to the oral examination. For the oral exam, a five-member committee assesses the student's ability to master the research subject of his/her Ph.D. thesis, including the ability to think critically and creatively about their area, and to communicate their ideas. Students must also demonstrate a firm grasp of pathology and related areas of immunology and molecular biology.

### 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)?

Our students successfully completed all the requirements for admission to candidacy and are in the final stages of their projects, with graduation in sight.

## 5. Findings: Interpretations & Conclusions

What have you learned from these results? What does the data tell you?

The students in our program are doing well, meeting the objectives and have developed the skills required at their stage in the program.

## 6. Closing the Loop: Dissemination and Use of Current Assessment Findings

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

Student progress and program assessments are shared with the Program Director (Dr. Kornbluth), the student progress committee (Drs. Chen, Kornbluth, Ray) and the Pathology Chair (Dr. Katherine Robbins) on a yearly basis. They are shared with the Pathology Research Division Faculty as needed for programmatic assessment.

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.

No actions are currently planned.

If no changes are being made, please explain why.

The program is meeting the needs of the students and we are seeing great outcomes.

## 7. Closing the Loop: Review of Previous Assessment Findings and Changes

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

N/A

B. How has this change/have these changes been assessed?

N/A

C. What were the findings of the assessment?

N/A

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

N/A

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