The doctoral program in Cell and Developmental Biology trains students to assume leadership roles in administration and scientific discovery in the broad areas of cell biology, cancer biology, developmental biology, and molecular genetics.

**Learning Goal 1 for Students:** Attain marked ability, scholarship, research and leadership skills concerning factors will provide a solid foundation in the professional careers.

Assessment of student achievement of Goal 1:
- Grades in graduate courses
- Qualifying examinations assessing depth and breadth of knowledge
- Review by faculty of student progress with advising and mentoring on a regular basis
- Placement in positions and careers that require ability and scholarship in the above areas.

Role of the program in helping students to achieve Goal 1:
- Close advising to assure that students are being prepared in a coherent and academically rigorous fashion
- Effective monitoring of student progress
  - Includes annual thesis meeting and reports on research progress from both the student and the student’s committee chair
- Periodic review of curricular offerings, degree requirements and assessment tools by program faculty and program director
- Acquaint students with non-academic career opportunities

**Learning Goal 2 for Students:** Engage in and conduct original research that will lead to peer-reviewed publications in scientific literature.

Assessment of graduate student achievement of Goal 2:
- Preparation of and defense of Ph.D. dissertation proposal
- Assessment of quality of Ph.D. dissertation:
  - Public defense of dissertation
  - Critical reading of dissertation by committee of graduate faculty members and an outside committee member.
- Achievement of students as evidenced by professional placements, selection for conference presentations, peer-reviewed publications and individual grant attainment

Role of the graduate program in helping students achieve Goal 2:
- Provide early introduction to research methods and opportunities for research
- Provide opportunities to present research and receive feedback
- Maintain adequate funding levels through the research phase
- Provide comprehensive advising
Learning Goal 3 for Students: Demonstrate the ability to organize and effectively communicate oral and written scientific information.

Assessment of graduate student achievement of Goal 3:
- Review evidence of papers presented, publications and professional networking
- Evaluations of teaching effectiveness of graduate student if applicable
- Collection of placement data

Role of the program in helping students achieve Goal 3:
- Structure courses to emphasize scientific writing and presentation skills