Neuroscience

Learning Assessment Worksheet

1. Please describe your program's specific learning goals (list as many as appropriate; use 1-2 sentences to describe each):

Goals of the Graduate Program in Neuroscience

To produce trainees who are:

a. **Proficient in current practical and theoretical aspects of the field.** Introduce students to the breadth of Neuroscience investigation, spanning molecular to systems approaches, applied to questions ranging from neurodevelopment to neurodegeneration and aging, neuronal injury and repair.

b. **Adept at reading primary literature in a critical manner.** Assist the student in developing the tools needed for critical evaluation of data and to use these as a lifelong investigator.

c. **Able to conduct original and significant research.** Assist the student in developing competencies in these areas that will be further developed in postgraduate training.

d. **Proficient in presenting scientific data in a public forum, orally and in writing.** Enable the student to develop skills in scientific writing and oral presentation.

e**. Aware of ethical standards in research**. Inform and help incorporate the elements of responsible conduct of research into the student's work habits and professional activities.

f. **Experienced in writing and reviewing grant proposals**. Students are encouraged to submit a fellowship application to NIH, NSF or private foundation. The ACE exam uses the formatting and guidelines of an NIH NRSA application. Several of our electives hold a final session in which students evaluate their peers' proposals (however, grading is determined by the course director)

2. Does your program have a process in place to assess whether the students meet the defined learning goals? If so, please describe this learning assessment process, including who is involved, frequency of the assessment, and how the information is used:

Our learning assessment is comprised of coursework and exams primarily in the first 2 years, the Admission to Candidacy Exam (ACE) by the end of year 2, and thesis progress meetings with each student that must take place at least annually after completing the ACE. These meetings may occur more frequently if the student's thesis committee deems it necessary. The final dissertation exam assesses the candidate's overall appropriateness for the PhD degree. A terminal Master's degree may be awarded once the student has passed the ACE exam if deemed appropriate by the dissertation committee, Program Director and Chair.

3. Does your program currently systematically collect, store, and/or use for learning assessment at the program level any of the following outcome measures:

	Collect systematically (Y/N)	Electronically or paper stored (E/P)	Use for learning assessment (Y/N)
Direct measures:			
• Results of exams/tests for individual courses	Y	both	Y

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• Results of Admission to Candidacy Exam	Y	both	Y
• Quality of dissertations (eg, by sampling identify trends)	N	N	N
• Number of student publications and abstracts	Y	both	Y
• Quality of students' presentation skills	Y	N	Y
• Program metrics (eg, time to degree, completion rates)	Y	E	Program assessment, Y
• Other (please describe):			
Indirect measures:			
• Student feedback			
○ Student surveys	GSEC	E	Y
○ Focus groups	Y	P	Y
○ Exit interviews	Y		
• Alumni survey	N		Y
• Career tracking	Y		
• Other (please describe):			

4. Does your program regularly review and adjust (1) the program's specific learning goals, and/or (2) the manner in which outcomes are measured and how the information is used? If so, please describe how this is done:

1. Informal discussions throughout the year and at the annual retreat with the Program Director and course directors. These discussions typically involve how to achieve the learning goals, especially keeping the course topics and material current and course resources up to date.

2. Outcomes are assessed as numbers of program students who publish during their training (before dissertation defense), succeed in their ACE exams, complete and defend their thesis and obtain postdoctoral positions at strong research institutions.

3. Annual meetings are held via the Curriculum Committee Meeting and the Student Advancement Committee to track student progress and quality of Neuroscience courses.