1. Assessment information collected

Graduate program assessments were compiled in May of 2016 for the AYs 2014-2016 and analyzed (15 total assessments). Based on a 9-point rubric, analysis addressed whether students were below (i.e. deficient), at (i.e. stagnant), or above the expected level for their year in program expectations (i.e. exceeding). In addition, B&N faculty shared their impressions of how the program was serving B&N PhD students. The tabulated values below reflect the relative improvement in student outcome expressing the percent of students exceeding expectations minus the percent of students deficient in expectations.

1. Specific Knowledge of literature 33%
2. Ability to critically analyze literature 20%
3. Technical abilities 33%
4. Quantitative abilities -7%
5. General knowledge of Field 33%
6. Presentation skills 20%
7. Writing Skills 13%
8. Ability of formulate hypotheses and articulate methods for testing hypotheses 13%
9. Ability to act as an independent researcher (PhD) 20%

These primary data were used to address our first three learning objectives.

B&N PhD students met or exceeded expectations with one single exception that is quantitative abilities.

Publication Data was collected and are in departmental records.

Employment: Students are surveyed annually to determine employment status.
2. **Conclusions drawn from the information summarized above**
B&N faculty realize that students in the program are meeting or exceeding expectations. However, it is clear from the analysis that there seems to be a general weakness of student in quantitative abilities. Notably, students scored very well in general and specific knowledge of literature pertinent to their research as well as in technical abilities and in their conduct as independent researchers. Although writing skills are satisfying, improvement should be a goal in the near future. Overall, student in the B&N PhD program are very active disseminating research efforts in form of papers, presentations, and manuscript. The program provides excellent training indicated by the strong employment of graduates.

3. **Curricular changes resulting from conclusions drawn above**
   - B&N graduate program is now including specific neuroscience courses as part of the core curriculum requirement.
   - Independent of this outcome assessment but in agreement with data analysis, B&N faculty will implement a 4 semester sequence of the colloquium addressing specific skill sets with an emphasis on writing skills and, taken from this analysis, on quantitative skills.
   - A discussion is also necessary to reevaluate the PhD comprehensive examination to address equally the necessity to assess comprehensive science knowledge as well as a clear future research plan most likely in form of a thesis proposal.
   - B&N faculty are discussing to move early graduate education away from a topic-dictate curriculum and shift towards a interdisciplinary gateway courses with a strong emphasis on technical, hands-on training.

4. **Identify the faculty members involved in reaching the conclusions drawn above and agreeing upon the curricular changes resulting**

   Tom Green William Simpson, William Howard, Tom Kuhn