MEMORANDUM

DATE: October 7, 2016

TO: Michael Webster, Co-Director, Neuroscience Program
    Grant Mastick, Co-Director, Neuroscience Program
    Jack Hayes, Chair, Department of Biology
    Michael Crognale, Chair, Department of Psychology
    Jeff Thompson, Dean, College of Science
    Debra Moddelmog, Dean, College of Liberal Arts
    Larry Engstrom, Past Interim Dean, College of Liberal Arts

FROM: Kevin R. Carman, Executive Vice President & Provost
      Joseph I. Cline, Vice Provost, Undergraduate Education

SUBJECT: Neuroscience Program Review

We write to set forth the conclusions and our recommendations regarding the Neuroscience program review in 2016.

We commend the co-directors for engaging in the program review and carefully preparing the self-study and arranging the external visit schedule. The reviewers were clearly impressed with the strength of the program, its students and faculty. They cited the excellence of the neuroscience faculty and specialists and the contributions they are making in the field. Additionally, the reviewers thought it remarkable how the faculty have actively engaged the undergraduate students in their research. The reviewers were provided several opportunities to interact with students and were impressed with the education they were receiving as well as their intellect and motivation. Likewise, the curriculum for the program was seen as rigorous and comparing favorably with other undergraduate neuroscience programs.

After reviewing the external reviewers’ report, the program co-directors’ response, and the CLA and COS deans’ joint response, a closing meeting was held on August 26, 2016, to discuss the outcomes of the review and come to an understanding on the directions that the program and participating departments and colleges should take in the coming months. After identifying the strengths noted by the reviewers, there was a discussion of the various opportunities and future directions the program leadership, with the support and guidance of the colleges, can take in the coming months.
Many of the topics and recommendations contained below will require some discussion and agreement between the co-directors, relevant department chairs, and college deans. We request that these matters and others that are worked out be memorialized this academic year in a memorandum of understanding signed by all parties and forwarded to this office to become part of the program review file. We offer the following recommendations concerning the review:

- **Advising.** The self-study document identified issues with advising of neuroscience majors, and the reviewers confirmed this in conversations they had with faculty and students. The deans agreed in their response that more cross-college collaboration on advising of NSC majors needs to take place and that the system of division of advising by alphabet is not working. In addition, they have agreed that moving to a system of advising using professional advisors dedicated to neuroscience majors is preferred. The deans also agreed in their response to jointly fund a lecturer who would report to the co-directors and be responsible for advising Neuroscience students in addition to teaching one lower-level course per semester. As the university and college move toward hiring and using more professional advisors, particularly for lower level undergraduate students, departments and programs will need to clearly articulate and plan for the role of faculty in advising students, which role we foresee as being more specific advising for higher-level undergraduate students as well as career advising. The details of the program’s plan as well as long-range planning for the use of one or more professional advisors should be worked out and contained in the MOU mentioned above.

- **Curriculum.** While there were no major issues with the curriculum expressed by the reviewers, there were some curricular recommendations that should be addressed. There is unanimous agreement in the report and responses that an NSC course prefix is appropriate and will help establish a stronger identity for the program. Since the date of the closing meeting, the Provost’s Office has received approval from NSHE to create the NSC prefix. The deans suggested, and we agree, that cross-listing existing PSY or BIOL courses that fit within the neuroscience major is a good idea. The reviewers did note some redundancies and gaps that, if addressed, would strengthen the curriculum. As stated in the closing meeting, Bill Macauley, Director, Composition and Communication in the Disciplines Program, may be able offer ideas and refer the co-directors to resources that could be used to intensify the writing experiences in the program. Since the date of the closing meeting, Dr. Macauley has contacted Drs. Webster and Mastick to provide assistance.

- **Undergraduate Research.** The reviewers were impressed with the high number of undergraduate students who are actively engaged in the university’s research, and the deans support the program co-directors’ goal of ensuring those opportunities continue, even as enrollments increase. We are confident that the co-directors will explore the creative ideas expressed in the program review process such as grouping students into research teams and expanding opportunities through contacting other departments. If not already done, we encourage the program representatives to contact Scott Mensing, Director, Undergraduate Research, to see what ideas and resources he has in connection with this goal.

- **Developing a Neuroscience Program Culture.** Some of the items above will address the need to develop a stronger program culture. The NSC course prefix and improvements to the advising program are two.
It appears there is student involvement in two organizations—the Nevada Neuroscience Society and a chapter of Nu Rho Psi, the national honors society of neuroscience, and these organizations could likely play a role in this. We recommend that the co-directors continue to solicit the assistance of students in these organizations in planning activities that further the neuroscience student culture.

- **Co-Directors’ Voice and Participation for Resources.** The co-directors expressed the concern at the closing meeting that as an interdisciplinary program they did not have access to development, advising, and other resources that they should have, nor did they have a voice in lobbying for these resources on par with other academic programs. At the closing meeting, the deans were supportive of the idea of ensuring that the program co-directors were included with the chairs and other program directors in appropriate meetings and communications. The details of how this will be achieved should be included in the Memorandum of Understanding between the colleges, departments, and program.

- **Teaching-Load Considerations.** The issue of appropriate teaching loads also surfaced in the Psychology program review. The chair and dean were generally in agreement that teaching loads could be reduced for faculty involved in the neuroscience program, and we trust that this issue will be resolved in the coming year and memorialized in the MOU.

- **Creation of an Institute for Neuroscience.** The creation of an Institute of Neuroscience was a recommendation by the reviewers. The discussion at the closing meeting identified the major purposes of the institute as (1) providing a mechanism to coalesce and strengthen the research at the university in neuroscience; (2) providing a governance structure for the academic program; and (3) creating and enhancing development possibilities for the program. If an institute were formed, it would no doubt play a role in the development of a neuroscience student “culture” on campus as well. We advise that the deans, chairs, and co-directors meet to discuss this topic and come to an understanding on what such an institute would and would not be. This understanding would be informed by the conversations that will also be taking place concerning the appropriate college home for the CBS faculty and program as recommended in the Psychology program review closing memo. Once those understandings are reached, the co-directors could explore the creation of an institute, share their recommendations with the deans, who will then bring it to the provost for his review and permission to proceed.