AOE Analysis of AANP’s 2015 Membership Survey

A short survey was sent to the 2015 membership base of the American Association of Neuropathologists (AANP) to gain a better understanding of current neuropathology practice characteristics and future topics for the annual conference. A total of 160 members provided responses to the 19 questions within the survey and the summary of these results are described below.

The survey asked members to rate 19 different clinical assertion questions using a 5-point Likert-type scale from 1=Disagree Completely to 5=Agree Completely. These questions were developed to determine member’s level of knowledge regarding five separate therapeutic topics in neuropathology.

Figure 1 provides the results for the five questions evaluating knowledge in the area of intraorbital pathology. The first two statements in figure 1 are false, while statements three through five are true. While four out of the five statements had a mean response in the desired direction, educational need among members is documented by this data, and the statement with the mean on the incorrect side of the scale indicates where additional education is appropriate, including:

- The majority of intraocular astrocytomas are associated with neurofibromatosis type 1. (False statement, mean of 3.28)

Figure 2 provides the results for the three questions evaluating knowledge in the area of chronic traumatic encephalopathy (CTE). The first statement in figure 2 is false, while statements two and three are true. Only the third statement had a mean score in the desired direction (agree completely), and the statements with the mean score on the incorrect side of the scale indicate where additional education is appropriate, including:

- Chronic traumatic encephalopathy has a unique tau isoform profile and phosphorylation state signature that differs from Alzheimer Disease. (False statement, mean of 2.97)
- TDP43 inclusions are seen in all advanced stages of chronic traumatic encephalopathy. (True statement, mean of 2.86)
Figure 3 provides the results for the five questions evaluating knowledge in the area of Amyotrophic Lateral Sclerosis (ALS)/Frontotemporal Dementia (FTD). The first three statements in figure 3 are false, while statements four and five are true. Only the true statements had a mean score in the desired direction (agree completely), while the false statements had mean scores in the opposite direction. This indicates where additional education is appropriate, including:

- Mutations in genes that encode for DNA binding proteins including TARDBP, FUS, MATR3, HNRNPA2B1 and HNRNPA1 are pathogenic for ALS. (False statement, mean of 3.38)
- TDP43 protein aggregates are seen in nearly all cases of ALS, including familial ALS cases linked to known autosomal dominant mutations. (False statement, mean of 3.24)
- The FUS/TLS mutation form of ALS is inherited in an autosomal dominant manner and has a long clinical course. (False statement, mean of 3.13)

Figure 4 provides the results for the three questions evaluating knowledge in the area of Glioblastoma Immunotherapy. All statements in this topic area are true and members answered these questions in the desired direction. The statement with the lowest mean score may indicate where additional education is appropriate:

- Rindopepimut is a peptide vaccine that generates an immune response against EGFRvIII and has demonstrated an increase in progression free and overall survival in Phase II trials. (True statement, mean score of 3.36)
Figure 5 provides the results for the three questions evaluating knowledge in the area of CNS Tumor Classification, Prognosis, and Reporting. The first statement in this topic area has no correct answer, however, the result indicates that the majority of members are not using the ISN- Haarlem Consensus Guidelines for tumor classification and grading (mean score of 2.95). The second and third statements are true and were answered in the desired direction by most members.

Conclusion:
Areas of need for additional education were revealed in the 2015 Membership Survey. These include education related to intraorbital pathology, chronic traumatic encephalopathy and ALS/FTD. Additionally, only one statement was within one point of the desired answer. This indicates that members would benefit from education in all areas surveyed for 2015.