

## Abstract #5: Poster (Research Study)

### Evaluation of University of Washington Medical Laboratory Science Clinical Rotation Length and Student Performance

**Background:** Local changes and needs in blood bank operations, allowed us to increase our Medical Laboratory Science (MLS) blood bank rotation to four weeks by reducing rotation length for clinical chemistry, microbiology and hematology from six weeks to five weeks. We evaluated the impact of this change on American Society for Clinical Pathology (ASCP) Board of Certification Exam (BOC) performance.

**Methods:** We compared BOC scores for 119 MLS graduates with six-week clinical rotation lengths in chemistry, microbiology and hematology (2009-2013) and 127 MLS graduates with five-week rotation lengths in these disciplines (2014-2018). We evaluated first time pass rates, overall certification scores, specific discipline scores, and student rotation length satisfaction surveys.

**Results:** Mean  $\pm$  SD overall BOC scores for six-week rotations ( $547 \pm 74$ ) was not significantly different from overall BOC scores for five-week rotations. Similarly, there was no significant effect on BOC scores for chemistry, microbiology, or hematology. The mean first-time pass rate for six week rotations was 97% compared to 96% for five-week rotations. Student satisfaction surveys received from 282 out of 307 (92%) students during 2014-2018 indicated that the five-week rotation length was adequate.

**Conclusion:** Reducing rotation length had no detrimental effect on BOC scores or student satisfaction. These findings allowed us to respond to changing patterns in laboratory medicine. Beginning in 2018, students will receive a one week rotation in one of six molecular diagnostic testing laboratories, including hematopathology, virology, microbiology, genetics and blood bank. These rotations may be expanded as laboratory testing moves in this direction.