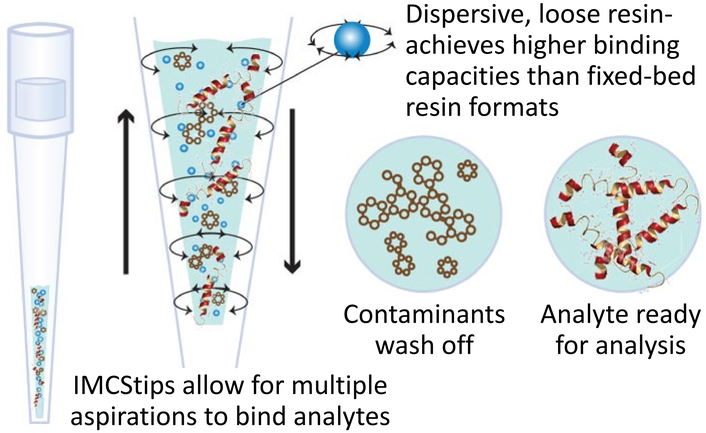
Efficiency of In-tip extractions for peptide desalting and phosphopeptide enrichments using commercially available automated liquid handling systems

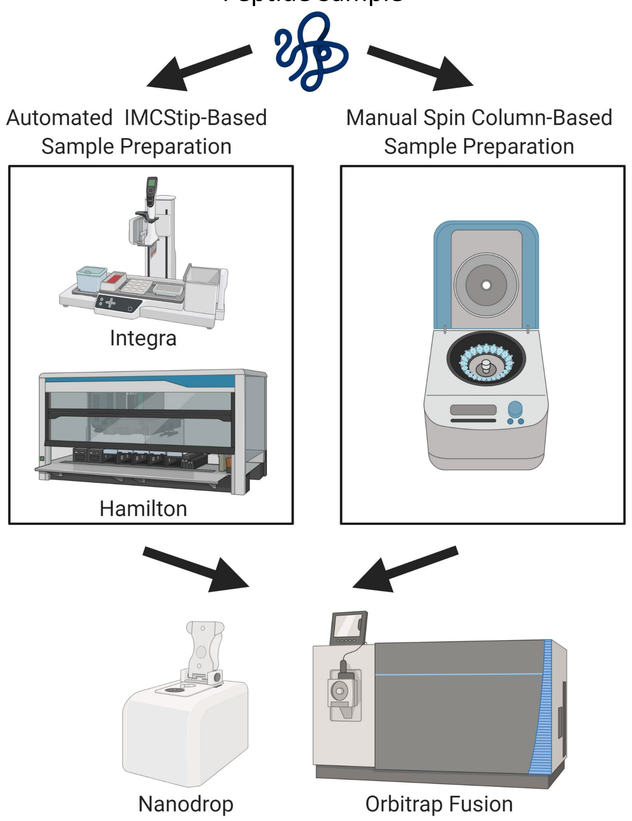
Todd Mullis*[1]; Andrew Lee[1,2]; Rebekah Woolsey[3], David Quilici[3]; Qian Wang[1]

[1]UofSC, Department of Chemistry and Biochemistry; [2]IMCS, Inc; [3]Mitch Hitchcock, Ph.D. Nevada Proteomics Center

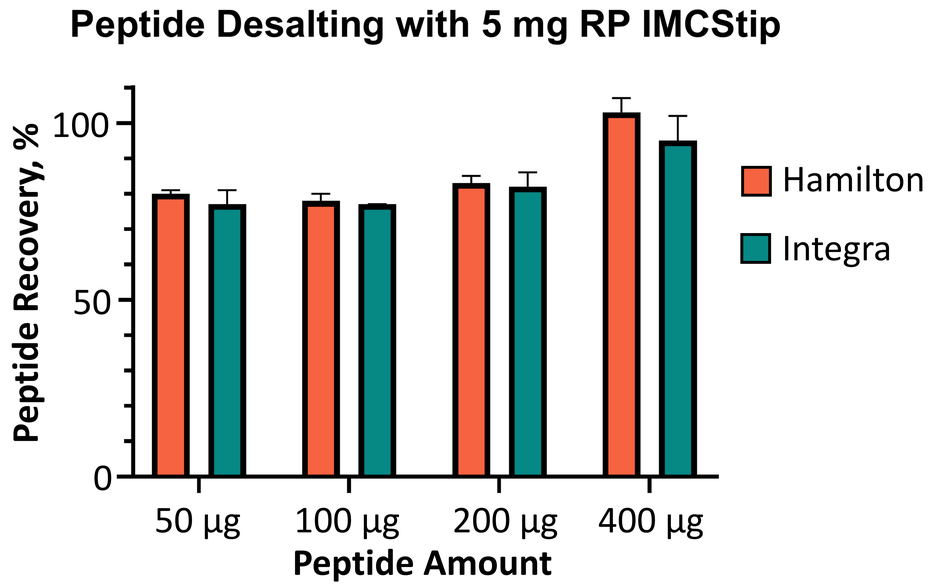
Introduction



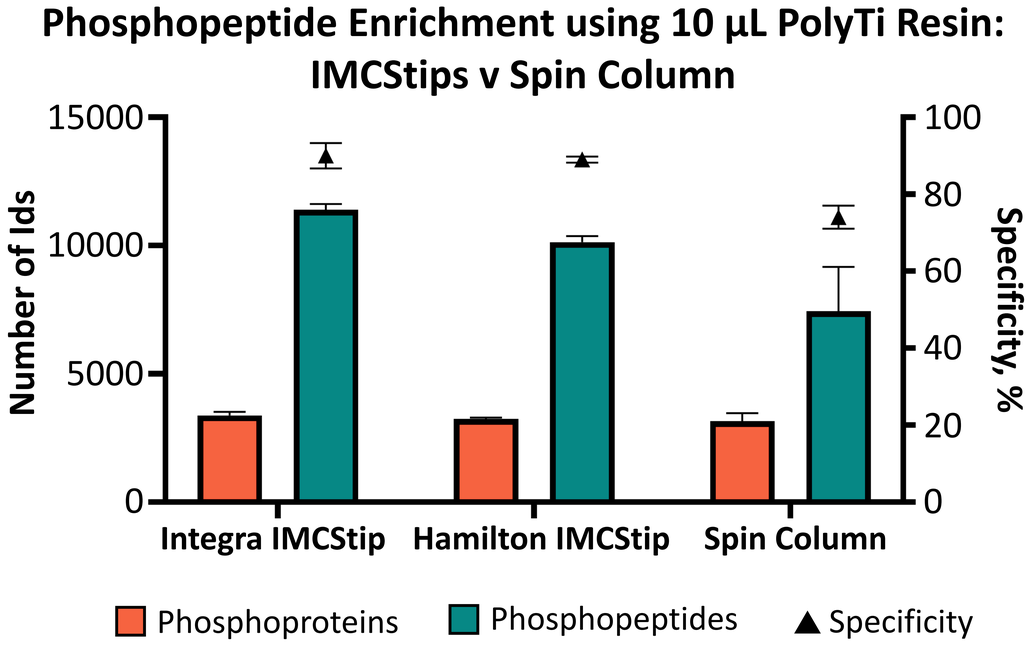
Instrumentation & Methods



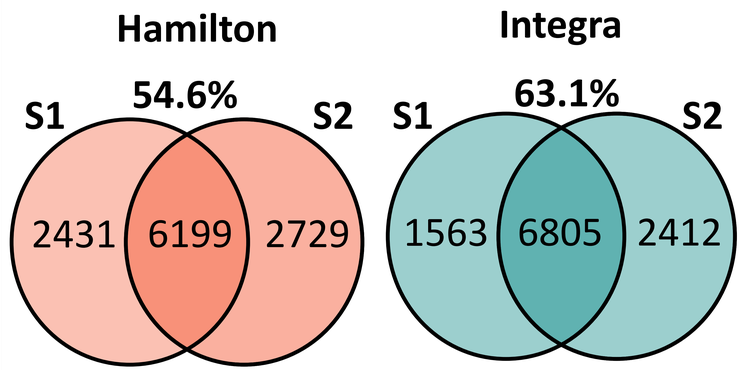
Desalting Efficiencies



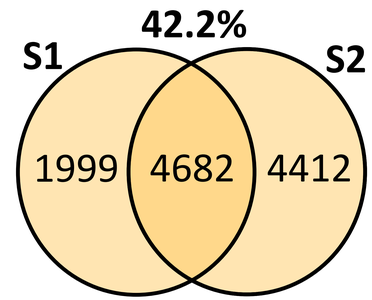
Phosphopeptide Efficiencies



Phosphopeptide Overlap



Spin Column



Conclusions

- Fully automated sample preparation on Integra Assist & Hamilton STAR using IMCStips
- ~80% Peptide recovery
- > 10,000 phosphopeptides from 200 µg cell lysate

References

Mullis, B. T., et al. (2020). SLAS Discov **25**(3): 277-286. DOI: 10.1177/2472555219878152

*Contact: Todd Mullis – Mullist@email.sc.edu