

Review of 2A

October 10, 2019

Rating:

1. What is the potential for the proposed activity to:
 - (a) Intellectual Merit? Very Good
 - (b) Broader Impacts? Very Good
2. Creative, original, or potentially transformative concepts? Good
3. Proposed activities well-reasoned, well-organized, and based on a sound rationale? Incorporate a mechanism to assess success? Good
4. How well qualified is the individual, team, or institution to conduct the proposed activities? Very Good
5. Adequate resources? Very Good

Summary

Intellectual Merit

The intellectual merit seems is quite in this proposal. Establishing ground truth seems to be critical for the analysis of algorithms in the field of mass spectrometry.

Broader Impacts

The broader impacts are mostly apparent in this proposal. The user-friendly data visualization JS-MS software is great for lowering the technological barriers and increasing the effectiveness of contributions from non-computer science community into mass spectrometry.

Summary Statement

Everything in the proposal seems to be very good in quality. The work on JS-MS seems good. I think what lacked the most is forms of assessment. There didn't seem to be much for verifying results. For JS-MS, maybe have usability tests. Or if there is another similar software suite for MS, maybe comparing against that. And for ground truth data, it feels like there should be some way to show that personally-annotated MS data is superior to algorithmic annotation and that it is consistent. Final note, the proposal is written from the prospective that the work is already completed.