

Invitation for First Interlaboratory Comparison Exercise for Lipidomics

Since 2014, the National Institute of Standards and Technology has been conducting an interlaboratory comparison exercise for lipidomics. The main objectives were to (1) highlight the current variance and/or agreement present in lipidomic measurement within the community, (2) provide consensus means with associated uncertainties for lipids measured in Standard References Materials (SRMs) from diverse methodologies and institutions, and (3) identify problematic areas with current lipid measurement. In total, 31 laboratories submitted lipid data, spanning both global and targeted lipid profiling laboratories.

The comparison exercise is now complete, with one manuscript focusing on SRM 1950 in co-author review, and additional manuscripts to follow (examining SRM 2378 and comparing the results from both SRMs to laboratory-submitted method information). As we conclude this initial comparison exercise, we want to capitalize on the generated momentum regarding efforts to improve community-wide lipidomics measurement. Thus, we have organized a follow-up survey, using Survey Monkey, to further engage the entire lipidomics community and to examine where the next efforts for NIST and the lipidomics community as a whole, should be placed (e.g., standardization, quantitation, etc.). We aim to share the results with the lipidomics community, via publication, when the survey is complete.

To fully realize a lipidomics community in which lipid measurement is standardized and harmonized across laboratories, we need your participation in this survey to supplement our comparison exercise findings, to better ascertain the next measurement challenge. We hope that you (or someone qualified to report the activities of your laboratory) will participate in this short survey.

We anticipate that the survey will take approximately 12 minutes to complete. While we ask for participant name, the final publication and results will be lab de-identified.