

OMB Control No. # 0693-0033 – NIST Generic Clearance for Program Evaluation Data Collections

Title: Supplemental Survey to First Interlaboratory Comparison Exercise for Lipidomics

Four Standard Survey Questions

- 1.) **Explain who will be surveyed and why the group is appropriate to survey.** The survey cohort will consist of the lipidomics laboratories that were contacted during the ongoing lipidomics interlaboratory exercise (n = 100, started in 2014), in addition to laboratories who have indicated over the past two years that they wish to participate in upcoming interlaboratory lipidomic exercises (n ≈ 50). The purpose of this survey is to ascertain the lipidomics community's interest in regards to NIST's next measurement effort. In order to properly meet the needs of our lipidomic stakeholders, this survey has questions aimed to better assess the current status of lipidomics measurement and to further define what the community finds as most critical or important, in regards to improvement of lipid measurement (e.g., new methods, standards, standardization, etc.). To best meet the needs of the entire lipidomics community, our survey cohort represents a unique and diversified cross-section of laboratories, both experienced and newly-formed, domestic and international, global and targeted profiling, and which come from different lipidomic arenas, including academia, industry, core facilities, and government.
- 2.) **Explain how the survey was developed including consultation with interested parties, pre-testing, and responses to suggestions for improvement.** The survey questions were developed using the resultant data from the interlaboratory comparison exercise on lipidomics. Questions were then tailored to either clarify the data or to gauge the level of interest in the community to pursue specific measurement questions. Consequently, responses to the survey questions will provide information on laboratory protocols and methodologies, quality control practices, quantitative efforts, and the future of NIST in lipid measurement. We hope this survey will help springboard new NIST efforts into the right direction, according to stakeholders' interest.
- 3.) **Explain how the survey will be conducted, how customers will be sampled if fewer than all customers will be surveyed, expected response rate, and actions your agency plans to take to improve the response rate.** We intend to send the survey to 150 participants, representing a unique lipidomics community cross-section, using Survey Monkey. Based on our interlaboratory comparison exercise rate of participation (30%), we anticipate that the rate of participation will likely be better (less work involved completing a survey), estimated at 50 % participation. We will also send invite reminders periodically and advertise the survey at the American Society for Mass Spectrometry in June.

- 4.) **Describe how the results of the survey will be analyzed and used to generalize the results to the entire customer population.** As described above, the results of the survey are intended to aid in the development of supplemental interlaboratory exercises or measurement activities and to align NIST efforts with requests from the lipidomics community. We also aim to publish our findings in a lipid journal, so that the lipidomics community can also benefit from the information. In the end, this survey will be an excellent way for NIST to continue its establishment as an active lipidomics community member and momentum as a leader in lipidomics measurement efforts.