Method Assessment of Non-Targeted Analyses (MANTA)

Through the MANTA Program, NIST is developing new reference materials and data for the evaluation and comparison of non-targeted analytical techniques. The goals of the problem are to:

- improve between-laboratory comparability of non-targeted analysis results
- provide performance metrics for the evaluation and monitoring of non-targeted analysis results

The first interlaboratory study will be focused on the use of a solution-based material for non-targeted analytical techniques using liquid chromatography with high resolution mass spectrometry (LC-HRMS). Participants will be provided with multiple test solutions containing a limited number of compounds, which are to be analyzed by their typical non-targeted analysis instrumental method. Individual participant data will be used to create a comparison tool in which participants will visualize how their method compares to others in the community.

Any labs from academia, government agencies, industry, and instrument manufacturers who use LC-HRMS for non-targeted analysis are encouraged to participate.

Study Information at a Glance

- **Number of samples in first study:** 5 solutions (includes replicates)
- **Instrument limitations:**
  - Reversed-phase liquid chromatography
  - Electrospray ionization, positive polarity
  - High resolution mass spectrometry
  - MS1 or MS1/MS2 possible

**Proposed Study Dates:**
- Samples Shipped: April-May 2018
- Samples Analyzed: May-August 2018
- Data Submitted: August 2018
- Participant Report: November 2018

If your laboratory would be interested in learning more about this program and/or participating in the first interlaboratory study, please email manta@nist.gov