

**JCGG Luncheon Seminar 1 (Shimadzu Corporation)**

**Basic techniques for lipid metabolomics (lipidomics)**

**Ryo Taguchi (University of Tokyo)**

As analytical methods for lipidomics, we selected several different approaches in the identification of phospholipid molecular species. The first one is shotgun LC-MS/MS analysis with data dependent scan, and the second one is structure- related focused method such as precursor ion scanning or neutral loss scanning. Both types of data can be subjected to our search engine," Lipid Search", and most probable molecular species can be obtained with their compensated ion intensities. With regard to creation of a substantial lipid database, establishment of measurement methods based on the present approach, and development of an identification tool, will play important roles in lipidomics.