

# Mass Spectrometry-based Multi-Omics: Combinations of Proteomics, Metabolomics, and/or Lipidomics

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# Abstract

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## Introduction

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Here is where we briefly go over the following:

1. Cover other reviews
2. What is proteomics
3. what is metabolomics
  - polar metabolomics
  - lipidomics
4. what does multi-omic integration mean?

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## Sample Preparation for Multi-Omic Analysis

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## References

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1. **Quantitative shotgun proteome analysis by direct infusion**  
Jesse G Meyer, Natalie M Niemi, David J Pagliarini, Joshua J Coon  
*Nature Methods* (2020-12) <https://www.nature.com/articles/s41592-020-00999-z>  
DOI: [10.1038/s41592-020-00999-z](https://doi.org/10.1038/s41592-020-00999-z)
2. **Charge state coalescence during electrospray ionization improves peptide identification by tandem mass spectrometry.**  
Jesse G Meyer, Elizabeth A Komives  
*Journal of the American Society for Mass Spectrometry* (2012-05-18)  
<https://www.ncbi.nlm.nih.gov/pubmed/22610994>  
DOI: [10.1007/s13361-012-0404-0](https://doi.org/10.1007/s13361-012-0404-0) · PMID: [22610994](https://pubmed.ncbi.nlm.nih.gov/22610994/) · PMCID: [PMC6345509](https://pubmed.ncbi.nlm.nih.gov/22610994/)