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

This manuscript (<u>permalink</u>) was automatically generated from <u>jessegmeyerlab/2022-multi-omics-review@79bc815</u> on December 21, 2021.

Authors

- Jane Roe

Department of Something, University of Whatever; Department of Whatever, University of Something

- · Jesse G. Meyer
 - © 0000-0003-2753-3926 · ♠ jessegmeyerlab · ♥ j my sci

Department of Biochemistry, Medical College of Wisconsin · Funded by Grant R21 AG074234; Grant R35 GM142502

Abstract

Introduction

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?

Test adding citation [1]

Test adding citation by PMID [2]

Sample Preparation for Multi-Omic Analysis

- 1, sample preparation for proteomics
- 2, sample preparation for metabolomics 2.1 non-targeted metabolomics
- 2.2 targeted metabolomics
- 2.3 lipidomics

doi:10.1038/nprot.2016.156

https://www.nature.com/articles/s41596-020-0341-5

https://pubs.rsc.org/en/content/articlelanding/2020/an/d0an01149e/unauth

References

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

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: <u>10.1007/s13361-012-0404-0</u> · PMID: <u>22610994</u> · PMCID: <u>PMC6345509</u>