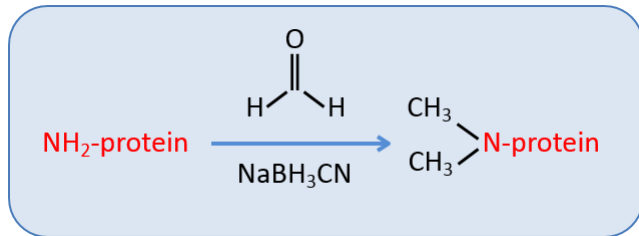
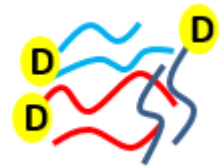


# Protein N-terminal Labeling and Analysis

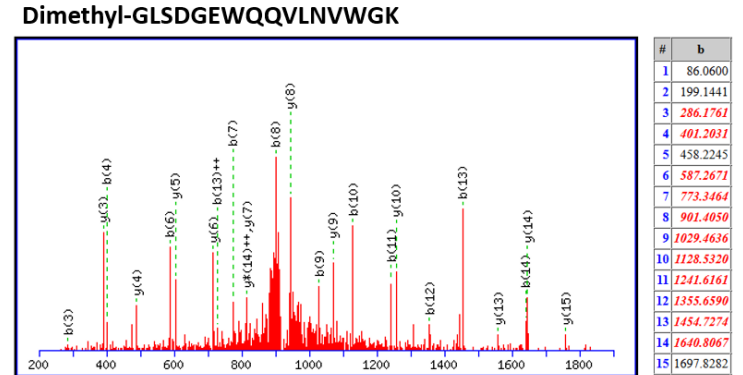
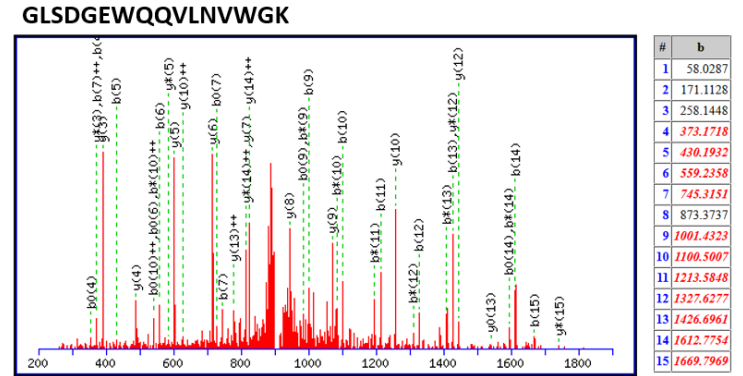
## Protein N-terminal dimethyl labeling



**Trypsin digestion** → **Peptide mixture (with protein N-terminal labeled)**



→ **LC-MS/MS analysis**



Determination of protein N-terminal sequence is important for the characterization of protein translation and processing. The techniques for identifying N-terminal sequence are in the midst of a technological transition from classical Edman sequencing to advanced mass spectrometry (MS)-based sequencing. To support this transition, ICBR-proteomics has improved a dimethyl labeling approach and established a systematic workflow for labeling, purification and identification of the N-termini of proteins, aka, N-terminome.