

## Quantitative Proteomics



Label-Free

Spectral  
Counting



SILAC

Metabolic  
Labeling



TMT/iTRAQ

Isobaric  
Tags



Acquisition

Data  
Strategies

### Label-Free Quantification

- Spectral counting
- Peak intensity measurement
- No labeling required

### SILAC Labeling

- Metabolic incorporation
- Heavy amino acids ( $^{13}\text{C}$ ,  $^{15}\text{N}$ )
- Cell culture applications

### TMT/iTRAQ Tags

- Isobaric mass tags
- Multiplexing 6-16 samples
- Reporter ion quantification

### DIA vs DDA

- DIA: all ions fragmented
- DDA: targeted selection
- Trade-offs in coverage and reproducibility