

Yingming Zhao received his Ph.D. degree from the Rockefeller University under Professor Brian Chait in 1997. Yingming's main research interests lie in developing and applying mass spectrometry-based proteomics technologies to discovery of undescribed cellular pathways (with current focus on protein post-translational modification (PTM) pathways and epigenetic mechanism). He uses an integrated approach, involving proteomics, biochemistry, molecular biology, and cell biology to decode PTM networks that have implications for human health and are not amenable to conventional techniques. His laboratory recently discovered ten types of new lysine acylation pathways, and identified and characterized their protein substrates, specific binders and regulatory enzymes. These PTM pathways play an important role in epigenetic regulation and cellular metabolism, and contribute to physiology changes and cellular dysfunctions associated with diverse inborn metabolic diseases.