

Bio:

Noah Earls is an undergraduate at Brigham Young University, working towards a BS in Biochemistry. He has been a researcher in the JC Price Lab since 2021. In his time there, he was principally responsible for the creation of a multigenerational Knock-In mouse model for use in the lab's overarching ApoE/Alzheimer's project. His primary research focuses on the application of Mass Spectrometry (MS) methods, especially Data Independent Acquisition, to multiple projects including Cancer and Alzheimer's disease (AD). As to Cancer, Noah focuses on the optimization and detection of specific proteins to assess the effectivity of Proteolytic Targeting Chimeras (PROTACs) in the targeted induction of E3 Ubiquitin Ligase protein degradation. With AD, Noah uses Deuterium Isotope Labeling to measure turnover rate and characterize concentration changes across ApoE genotypes. He has successfully connected complex Neuroproteomic pathway changes to risk factors in the search for a causal mechanism for AD. Moving forward, he will continue to apply and develop novel MS techniques to further the lab's research regarding the proteomic basis for complex disease.