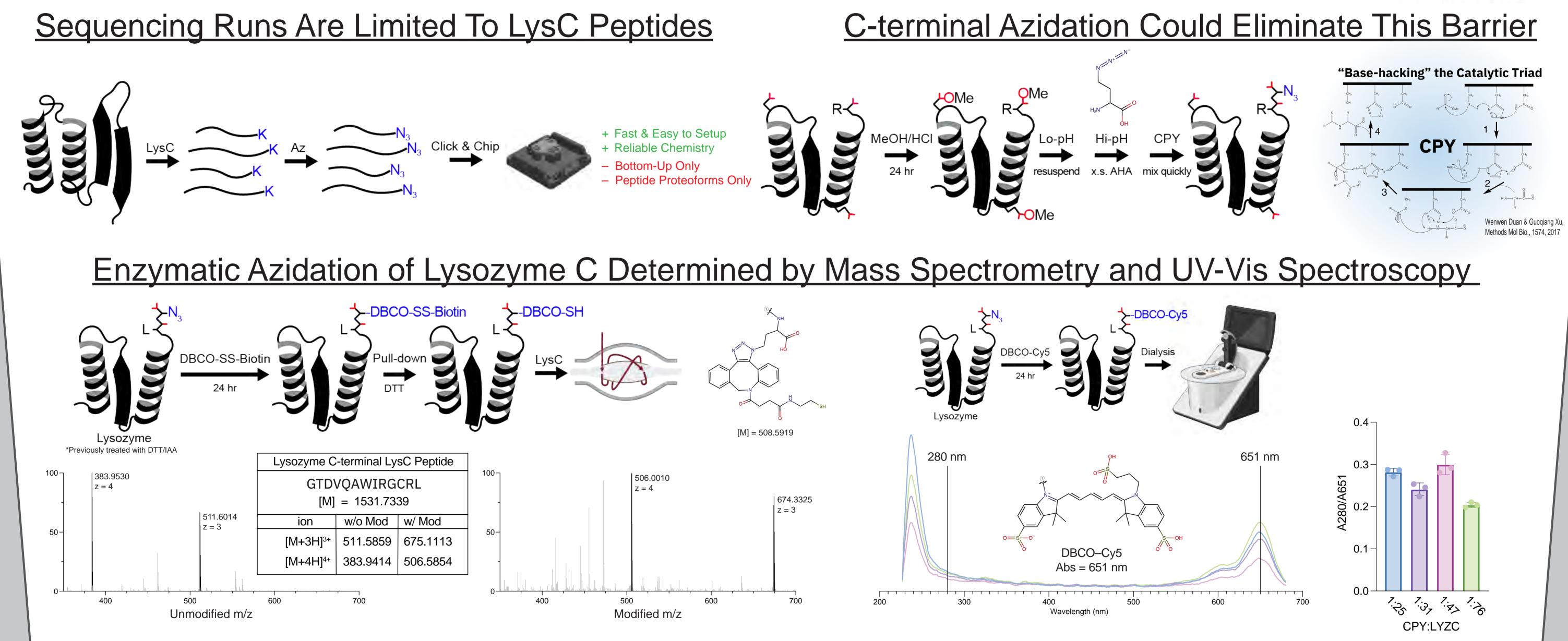


Enzymatic Addition of Azides to C-termini QUANTUM SI for Single-Molecule Sequencing

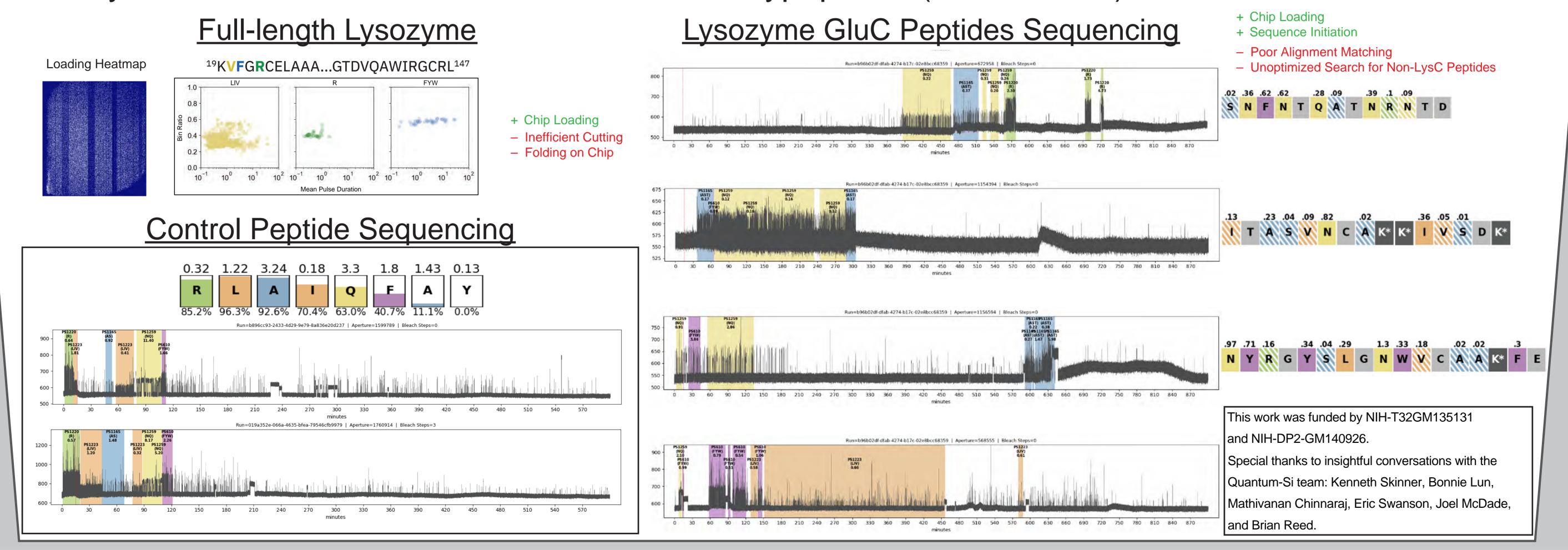
Edgar Manriquez-Sandoval, Yilin Shen, & Stephen D. Fried

Department of Biophysics, Johns Hopkins University, Baltimore, MD, USA

Next-generation Protein Sequencing Utilizes N-terminal AA Recognizers To Decode Peptide Sequences **Binding Kinetics** Fluorescent Lifetimes Sequencing = 0.7 -0.6 -- - - Collect Gate - 5.0 ratio Recognizers \$ 1.5-Laser Iuorescence Decay - hid SR 4 6 8 10 12 0.3 Global Shutter Waveform QN AS Aminopeptidase 0.2 -SB 2-\$ 1.5-Semiconductor chi 0.5-0. 10 4 6 8 Time (ns) 10



Enzymatic Additions of C-terminal Azides to Polypeptides (ENZ-A-CAP) on Quantum-Si Platinum



RS mean PD (s)