

Our immune systems use highly variable sets of adaptive immune proteins to provide targeted protection and memory against foreign agents. Current methods to discover new immune drugs and explore the vast diversity of adaptive immune proteins are generally limited in either quality or throughput. The limitations of current screening technologies make protein drug discovery and engineering time-consuming, expensive, and risky. Thus, we have established a suite of new high-throughput functional screening platforms for antibodies and T cell receptors. We will share examples of these technologies in diverse settings to explore basic aspects of immune receptor recognition, to study the biophysical mechanisms that support protective human immunity, and to improve immune drug discovery.



FUNCTIONAL SCREENING TECHNOLOGIES TO ENGINEER ADAPTIVE IMMUNE PROTEINS

BRANDON DEKOSKY

NOVEMBER 7, 2025

12-1 pm, 66-360


**LUNCH WILL
BE SERVED
SO PLEASE
RSVP BY 10/31**



ChemE MIT
Chemical
Engineering