



XINYU LING, Ph.D.

LABORATORY OF DR. SIDI CHEN
DEPARTMENT OF GENETICS
YALE UNIVERSITY

JANE COFFIN CHILDS-MERCK FELLOW

Dr. Xinyu Ling aims to improve cellular immunotherapies targeting solid tumors in [Dr. Sidi Chen's lab](#) at Yale University. To date, cellular immunotherapies have shown unsatisfactory results in treating solid tumors due to the immunosuppressive tumor microenvironment. Furthermore, CRISPR screening is a powerful tool for the identification of new cancer immunotherapy targets. However, existing approaches are limited in which types of cells can be targeted and in understanding the spatial arrangement of those cells. Dr. Ling will develop a versatile CRISPR screening method that will allow for simple “plug-and-play” targeting of many different cell types. The resulting platform will expand the use of CRISPR screening tools for cancer immunotherapies and may lead to the discovery of novel immunotherapy targets.

As a PhD student in [Dr. Tao Liu's lab](#) at Peking University, Ling used unnatural amino acid technology to improve [the genome-editing and cost efficiencies of CRISPR Cas9/Cas12a genome editors](#). This prior experience in optimizing genome engineering strategies will assist Dr. Ling in developing an agile cellular targeting platform to identify novel cancer immunotherapy targets.

W
O
T
E
F