

## **Aerin Yang Lab – Laboratory of Synthetic and Chemical Biology**

We are a dynamic research group working at the intersection of synthetic biology, chemical biology, and protein engineering to address fundamental and translational questions in immunology, cancer biology, and neuroscience.

Our goal is to develop molecular tools to study membrane receptors, protein interactions, and post-translational modifications, and to engineer next-generation precision therapeutics.

### **Research Areas**

You'll have the opportunity to work on:

- Synthetic Protein Interactions – Studying immune signaling and evasion using high-throughput synthetic platforms
- PTM Biology – Exploring how modifications control immune and cancer pathways using chemical and synthetic biology
- Therapeutic Engineering – Designing molecular tools and therapeutics for cancer and brain disease

### **What We Offer**

- A highly collaborative and interdisciplinary research environment
- Access to state-of-the-art technologies in protein engineering, structural biology, and synthetic biology/neurobiology
- Opportunities to pursue high-impact science at the interface of basic discovery and therapeutic development
- Mentorship tailored for future careers in academia, biotech, and translational research

### **Who Should Apply**

We welcome applicants from diverse scientific backgrounds, including molecular biology, synthetic biology, biophysics, structural biology, immunology, neuroscience, and computational biology. Experience with protein design, molecular engineering, or cell-based functional assays is a plus but not required.