

PROJECT OVERVIEW: Generative Wetware (EXP-002) Subject: Antibody LLM (Protein Language Model)

Objective: *To predict and generate novel antibody sequences capable of neutralizing specific antigens before the immune system naturally evolves them.*

Methodology: *Utilising transformer architectures (ESM - Evolutionary Scale Modeling), the pipeline was fine-tuned on millions of known protein sequences. By prompting the model with an antigen's structural constraints, it hallucinates novel binder proteins. These generated sequences are then scored in silico for binding affinity and structural stability.*

Current Status: *Pipeline architecture is fully defined. Waiting for compute resources to scale the parameter size.*

Lab Notes: *Teaching a machine to hallucinate biology. If it successfully prints an immune response, we bypass millions of years of evolution. If it fails, it generates highly expensive, useless goo. A risk worth taking.*