



Macula X Implementation

2020-2030 Timeline - Journey to Company Launch

2020

Idea Brainstorm

Brainstorm the nanopore structure technology idea. Pursue preliminary research and molecular dynamics (MD) studies.



2023-2024

Software Development

Optimize mathematical techniques to interpret signal perturbations. Develop novel machine learning algorithms (likely RL + CNNs) to output high resolution structures. Benchmark on XRD, Cryo-EM to check for quality standards.



2027-2028

Launch Worldwide Protein Structurome Project

With validated software and hardware, launch the worldwide protein structurome project with an ambitious goal to structure >80% of protein species in the human body.



2030

Company Launch

Begin the journey to develop novel protein therapeutics to forever eliminate chronic diseases like Alzheimer's and cancer.



2021-2022

Experimental Validation

Run first ever nanopore structure experiments. Validate theoretical workflow (e.g. molecular beacons) and revamp based off of experimental results. Identify optimal amounts of reagents involved.



2025-2026

Hardware Development

Develop nanopore flow cell structuring and automated library preparation hardware.



2029

Simulate Clinical Trials + Prepare for Launch

Use new protein structures to elucidate new information from biochemical transduction pathways involving side effects and toxicity to simulate clinical trials.

