Off-Zheimer's

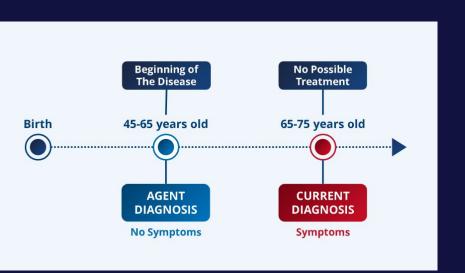
A help to Alzheimer's

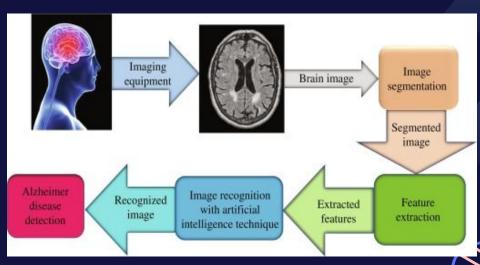
Raghav, Rizan, Rishabh, Haris, Kyle





How it Works Now?





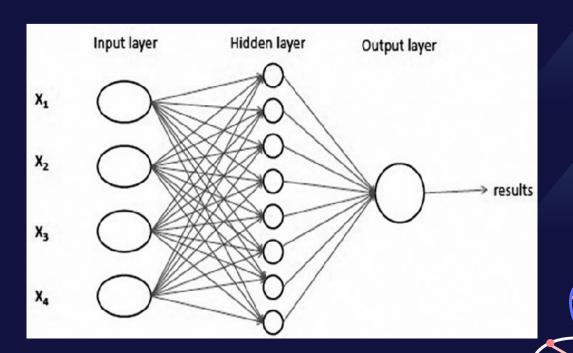
Our service

Analysis + helping deal with Alzheimer's

Intelligent Genomes

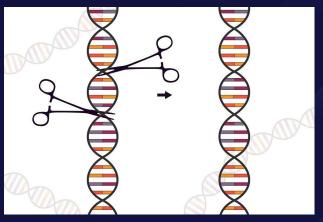
Assesses Genetic risk

- Mutations
- APOE
- PS-1
- PS-2



What's being implemented

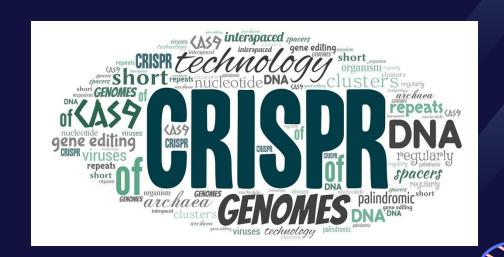
- CRISPRoff
- Slow gene expression of tau
- Slow effects of Alzheimer's



Difference?	Treatment	Problems
Aducanumab	Intravenous: dose is determined by a person's weight; given over one hour every four weeks;	It can lead to fluid buildup or bleeding in the brain
Donepezil	Tablet: Once a day; dosage may be increased over time if well tolerated	Nausea, vomiting, diarrhea, muscle cramps, fatigue, weight loss
Memantine	Tablet: Once a day; dosage may be increased in amount and frequency (up to twice a day) if well tolerated	Dizziness, headache, diarrhea, constipation, confusion
Rivastigmine	Patch: Once a day; dosage amount may be increased over time	Leading to weight loss, indigestion, muscle weakness
Galantamine	Tablet: Twice a day; dosing may increase over time Extended-release capsule: Same dosage as tablet but taken once a day	Decreased appetite, dizziness, headache
Our service	Full Process of slowing the Tau protein and using CRISPR	Not a complete cure

Next Steps and Conclusion

- Technology is not developed enough
- We are able to slow the process



Sources

https://www.nia.nih.gov/health/how-alzheimers-disease-treated

https://www.healio.com/news/primary-care/20200220/clinicians-view-new-alzheimers-drug-with-guarded-optimism

https://www.npr.org/sections/health-shots/2020/03/04/811461486/in-a-1st-scientists-use-revolutionary-gene-editing-tool-to-edit-inside-a-patient

https://nikomccarty.medium.com/almost-everything-you-should-know-about-crispr-how-it-works-top-applic ations-and-how-to-use-it-61e27b04bea6

https://slidesgo.com/theme/science-biology-center#search-Genes&nextSearchExpression-science&position-6&results-196