Alzheimer's Insights AI Prize
Accelerating Discovery with Agentic Intelligence

Team: Fingerprint

Project: Decoding Precision Signatures in Alzheimer's with Agentic AI – Optimal Therapeutic Strategy and Multidomain Intervention Guidance

Stage: Prototype in development

Project Summary

FINGERPRINT is an agentic AI platform that unifies genomics, proteomics, metagenomics, and global prevention data from the WW-FINGERS network (72 countries, 40+ trials) into a single reasoning engine for Alzheimer's biology. Powered by a 7B-parameter foundation model, the Thinking Microscope classifier, and an AlphaFold–GNINA–DiffDock design stack, it identifies mechanistic drivers, delivers BBB-ready therapeutic candidates, and generates personalized multidomain prevention plans through a federated, privacy-preserving architecture that produces FAIR objects compatible with the AD Workbench and scalable across globally representative populations, building an ethically-governed global infrastructure for accelerated Alzheimer's discovery.

Team Members

Adrián Noriega, Miia Kivipelto, Giovanni Traverso, Li-Huei Tsai, Arvid Gollwitzer, Anna Matton, Isaac Tucker, Daniel Mukasa, Deepak Subramanian, Ludivine Morvan

Organizations

Karolinska Institutet · Massachusetts Institute of Technology · BROAD INSTITUTE · MITMECHE · WW-FINGERS · FINGERS BRAIN HEALTH INSTITUTE · novo nordisk · Yale University · Imperial College London · Brigham and Women's Hospital, Founding Member, Mass General Brigham · ALAMAR BIOSCIENCES · THE PICOWER INSTITUTE FOR LEARNING AND MEMORY

Presenters

Adrián Noriega
MIT-Novo Nordisk AI Fellow, Department of Mechanical Engineering, MIT; Senior Scientist, Broad Institute of MIT and Harvard

Arvid Gollwitzer
Graduate Researcher, Broad Institute of MIT and Harvard