## **Short Proposed Research**

## **Project Title:** Novel gene-gene fusion as biomarkers in Alzheimer's disease

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## **Description of Proposed Context of Use**

We propose to study novel fusion proteins identified by us in Alzheimer Disease (AD) using multiple NIAGADS datasets. We have recently obtained preliminary data uncovering more than 170 gene-gene fusions from AD cortical tissues (post-mortem brains). We thus propose to study a recurrence of these fusions in NIAGADS datasets and their genotypic and phenotypic associations as potential biomarkers in AD using RNAseq and DNAseq datasets and in house methods.