

Featured Article

Crowdsourced estimation of cognitive decline and resilience in Alzheimer's disease

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Abstract

Identifying accurate biomarkers of cognitive decline is essential for advancing early diagnosis and prevention therapies in Alzheimer's disease. The Alzheimer's disease DREAM Challenge was designed as a computational crowdsourced project to benchmark the current state-of-the-art in predicting cognitive outcomes in Alzheimer's disease based on high dimensional, publicly available genetic and structural imaging data. This meta-analysis failed to identify a meaningful predictor developed from either data modality, suggesting that alternate approaches should be considered for prediction of cognitive performance.

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Keywords:

Alzheimer's disease; Biomarkers; Crowdsourcing; Big data; Bioinformatics; Cognitive decline; Imaging; Genetics

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