Trends in Publications of Genetic Associations Over Time for Multiple Diseases

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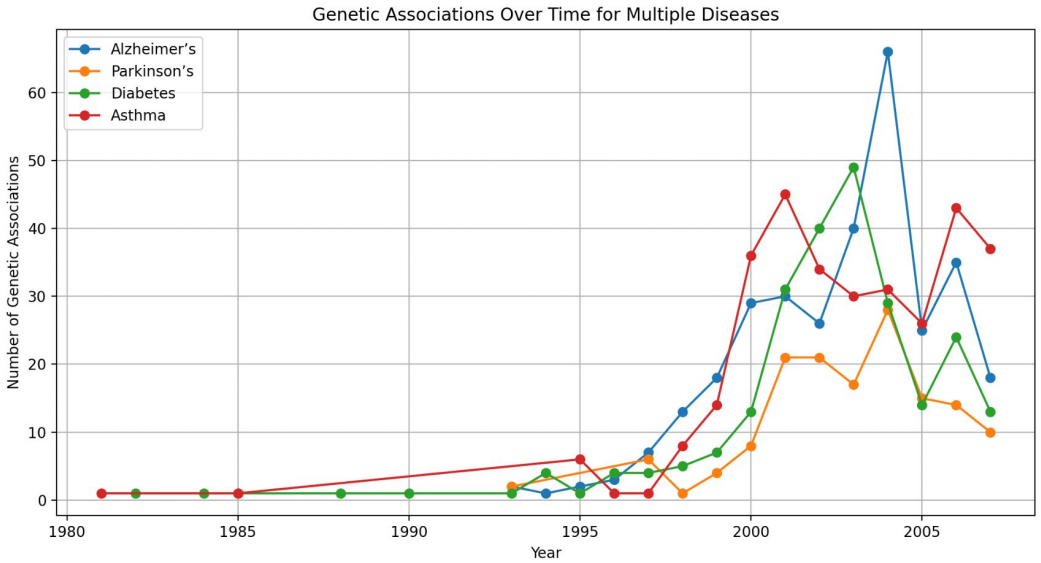
Has the number of genetic associations for certain diseases increased over time in research publications? This poster analyzes patterns in the number of publications for Alzheimer's, Parkinson's, Type-1 Diabetes, and Asthma to see how their genetic associations have trended in research over time.

The visualization in the bottom right was created with a Python script that uses the Matplotlib library to plot the number of publications over time for each disease stated earlier. The graph reveals several important trends about how the number of publications have increased or decreased for certain diseases. Initially, the number of publications before 1995 was very low overall. Then, there is a notable rise in publications for all diseases from mid 90s extending well into the 2000s, which is tied to the rise in popularity of genome research. Around 2005, Alzheimer's takes the lead in number of publications, demonstrating how researchers took more of an interest in the disease during this time because people were starting to be diagnosed with it more and more.
Overall, the visualization highlights how genetic research priorities shift over time, influenced by the current social/technological circumstances.

```sql
SELECT year, COUNT(*) AS num_records
    FROM gad
    WHERE association = 'Y'
      AND LOWER(phenotype) LIKE '%alzheimer%'
      AND year REGEXP '^[0-9]{4}$'
    GROUP BY year
    ORDER BY year ASC;
```



Becker *et al.* (2004). The Genetic Association Database. *Nature Genetics* **36**(5):431-2

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