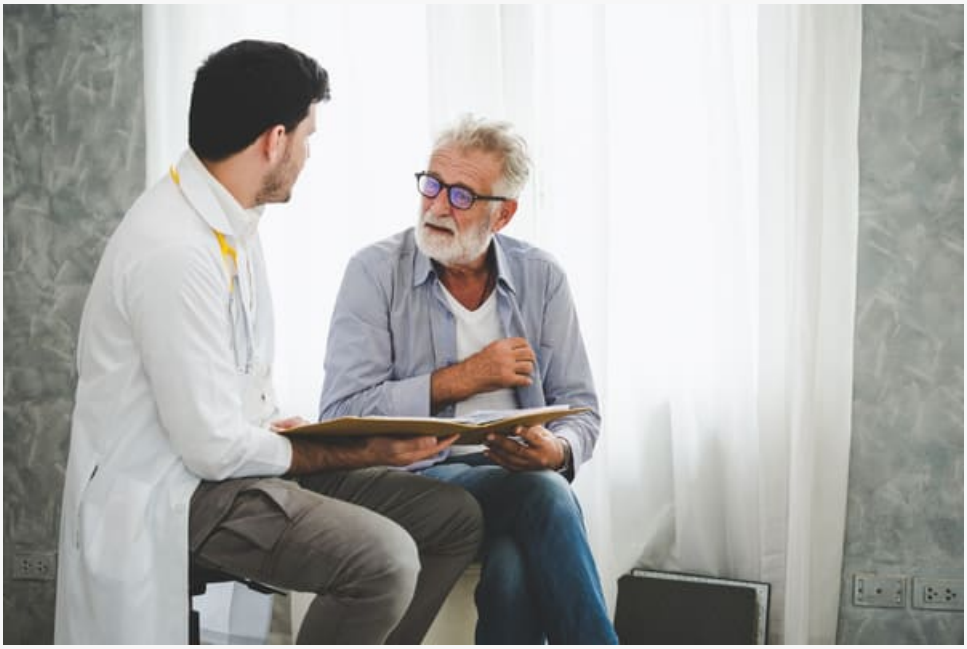
Brainteaser

Objectives



BRAINTEASER aims to combine data from society, the environment, and human health to create models that predict how amyotrophic lateral sclerosis (ALS) and multiple sclerosis (MS) progress. These models focus on meeting the needs of personalised medicine. The tools developed by BRAINTEASER show how artificial intelligence (AI) can benefit healthcare, using real clinical settings as proof-of-concept for their effectiveness. Outcomes from the project aim to provide clear and practical recommendations for public health authorities to improve care and decision-making.

To achieve this, BRAINTEASER focuses on:

Building a data system that combines existing clinical, genetic, and environmental information with new data collected from wearable devices, mobile apps, and environmental sensors during the project.

Creating AI tools to detect problems early, group patients by their specific needs, and predict how their condition might change. This allows for more personalised care, from diagnosis to treatment.

Studying the impact of pollution by creating models that look at how environmental factors, such as pollutants, might affect the risk of developing or worsening ALS and MS.

Improving healthcare practices by helping doctors and healthcare teams learn new skills and develop better ways to care for patients, strengthening the bond between patients and their caregivers.

Promoting open science by ensuring research and data are accessible to all, empowering patients with control over their data, enhancing health understanding, and fostering collaboration among researchers to improve outcomes.

Creating user-friendly software and mobile apps, with some tools freely accessible for researchers through open access and others potentially suitable for commercial development.

Impact

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Bringing Artificial Intelligence home for a better care of amyotrophic lateral sclerosis and multiple sclerosis

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info-brainteaser@lst.tfo.upm.es