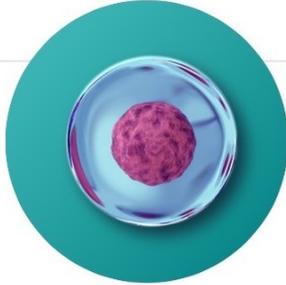


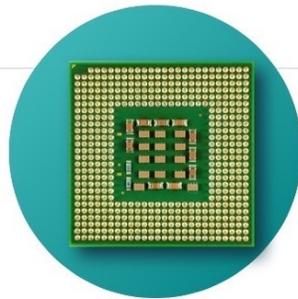
Alzheimer's Disease Research Without Animals A Shift Toward Human-Relevant Alzheimer's Research

A staggering 99.6 percent of Alzheimer's disease drugs that succeed in animal experiments fail in humans. A transition to **human-relevant** research methods may help lead to the **treatment and prevention of Alzheimer's**.



Alzheimer's-in-a-Dish

Human brain cells are grown in a 3D gel and then induced to develop plaques and tangles. Scientists can study how the disease progresses and test new therapies



Brain-on-a-Chip

Brain cells are embedded on a small chip, allowing researchers to quickly test the safety of new treatments



Neuroimaging

Researchers can monitor patients' brain health—the severity of plaques and tangles—by taking images before and after a drug or nutrition intervention



Patient-Derived Samples

Patient-derived brain tissues, blood, and cerebrospinal fluid samples are essential to discovering early diagnostic biomarkers of the disease



Clinical Trials

Researchers use epidemiological studies to determine how and why the disease develops in certain groups of people. Clinical studies help model disease progression and test new treatment options within groups of people

Find Out About a 3D Alzheimer's Disease Model

This model provides a versatile, modifiable experimental system that can be used to better understand the mechanisms of disease and potentially discover human-relevant drugs or therapeutic targets for Alzheimer's disease. The researchers were able to halt the inflammation process causing damage to brain cells by blocking two molecules in microglial cells, a key mediator of the inflammation in the brain that is associated with Alzheimer's.



THE CAMPAIGN TO BAN ANIMAL TESTING
AND RESEARCH IN THE UK