

‘Alzheimer’s in a Dish’—human brain cells in gel—opens new avenues for research

For the first time, and to the astonishment of many of their colleagues, researchers created what they call Alzheimer’s in a Dish — a petri dish with human brain cells that develop the telltale structures of Alzheimer’s disease. In doing so, they resolved a longstanding problem of how to study Alzheimer’s and search for drugs to treat it; the best they had until now were mice that developed an imperfect form of the disease.

The key to their success, said the lead researcher, Rudolph E. Tanzi of [Massachusetts General Hospital](#) in Boston, was a suggestion by his colleague Doo Yeon Kim to grow human brain cells in a gel, where they formed networks as in an actual brain. They gave the neurons genes for Alzheimer’s disease. Within weeks they saw the hard Brillo-like clumps known as plaques and then the twisted spaghetti-like coils known as tangles — the defining features of Alzheimer’s disease.

The work, which also offers strong support for an old idea about how the disease progresses, was published in [Nature](#). Leading researchers said it should have a big effect.

“It is a giant step forward for the field,” said Dr. P. Murali Doraiswamy, an Alzheimer’s researcher at Duke University. “It could dramatically accelerate testing of new drug candidates.”

Read full, original article: [Breakthrough Replicates Human Brain Cells for Use in Alzheimer’s Research](#)