

# BRAIN BOOSTERS

*Stem cells offer hope that Alzheimer's and other neurodegenerative diseases can be cured*

Many family members have watched helplessly as Alzheimer's disease destroyed someone they loved. One in 10 Americans over 65 has the debilitating degenerative brain disease, which robs patients of their memories, their ability to reason, their personality, and their independence.

There is no treatment available to cure Alzheimer's. But University of Illinois researcher Dr. Kiminobu Sugaya is searching for ways to use stem cells to repair the damage caused by Alzheimer's and other neurodegenerative diseases, such as Lou Gehrig's disease and Parkinson's disease.

In a sense, stem cells are the clay from which human beings are fashioned. A fertilized egg is the original stem cell and holds the potential to form an entire organism. Cell division leads to pluripotent stem cells, which can develop into many types of cells. Then stem cells become more specialized, differentiating to form cells with a particular function. These



## Technology

- Implantation of neural stem cells for cognitive improvement

## Faculty

- Dr. Kiminobu Sugaya

