# Scientific Breakthrough in Cryonics: Thawing Frozen Brain Tissue Without Damage



Scientists have achieved a significant milestone in the field of cryonics, successfully thawing cryogenically frozen brain tissue without damage. They have demonstrated that neurons retained their ability to send signals post-thawing—a major hurdle given the brain’s delicate structure. This breakthrough, accomplished by Professor Zhicheng Shao of Fudan University in Shanghai, was published in the journal *Cell Reports Methods*.

The innovation centers around a chemical mixture called MEDY (methylcellulose, ethylene glycol, DMSO, and Y27632), which prevents ice crystal formation in the brain tissue during the freezing process. The successful thawing of brain organoids, miniature brain models grown in the lab, marks an advance that could benefit drug research and holds potential for future whole-brain cryopreservation.

Cryonics, the practice of freezing bodies with the hope of future reanimation, has seen increased interest and growth. For example, the Cryonics Institute in Michigan has seen its clientele more than triple since 2006, with full-body preservation starting at $28,000. Although the field remains speculative, advancements like MEDY provide hope for further developments in preserving and potentially reviving human tissues in the future.