Researchers at the University of South Florida have fabricated a novel tissue preservation technique for use in tissue storage and transplantation.

Tissue preservation is necessary for a wide variety of medical purposes. Tissue transplantation techniques require increasingly sensitive preservation. The preservation techniques of this novel invention are ideal for newer retinal, fetal and corneal tissue transplantation. Other applications include central nervous system transplantation treatment for Parkinson disease, and newly developing synthetic lined tissue (for example, contact lenses lined with corneal endothelium, heart valves, artery and vein allografts).

This invention is a non-perfusing technique for prolonging the preservation of tissue by oxygenating the storage media and preventing the build up of lactic acid. The oxygen solubility increases with decreasing temperature. The media provides for longer tissue storage and enables transport of tissue from areas of surplus to areas of shortage.

Data has been gathered from corneal tissue, and the principles can be used to extend the viability of conjunctival, retinal, fetal, scleral, pancreatic, liver and central nervous system tissues, embryos, cartilage, bone and bone marrow, as well as hair grafts.

**ADVANTAGES:**
- Longer tissue storage
- Application in various organ transplantation
- No build up of lactic acid

**Storage Media for Prolonged Tissue Preservation**

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