Hyaluronic Acid (HA) is a naturally occurring, high molecular weight, linear polysaccharide that provides a temporary wound healing matrix. It also lubricates and cushions joints. HA, however, degrades in arthritic joints. Novel hyaluronic acid derivatives, formed by attaching polypeptide branches and amino acid sequences to hyaluronan in appropriate ratios can convert into self-assembling physical networks. These derivatives have enhanced osmotic, elastic and lubrication properties. The polypeptide branches can also increase resistance to degradation in vivo and carry antioxidants or peptide ligands.

- Enables polypeptide, antioxidant, and peptide ligand attachment to HA.
- Reduces amount of HA required for effective treatment.
- Facilitates non-invasive arthritis remediation as well as applications in tissue engineering and wound healing.


Leena Bhoite
Technology Manager
leena.bhoite@tvc.utah.edu
801-213-3581