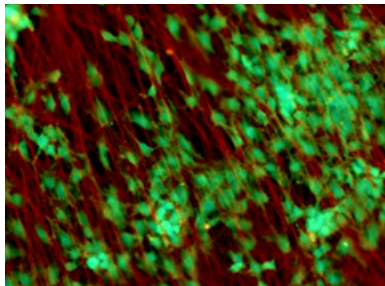


Engineering biological responses with advanced materials to enhance wound healing

Luna Labs Biomaterials works with government and commercial partners to develop products with diverse engineering and scientific challenges. Specific expertise includes:

- Electrospinning
- Hydrogels
- Nanoparticle Formulation
- Therapeutic Stabilization
- Controlled Drug Delivery
- Polymer Synthesis
- Biopolymer Functionalization
- Mechanical Characterization
- Cytocompatibility Assessment
- Therapeutic Characterization

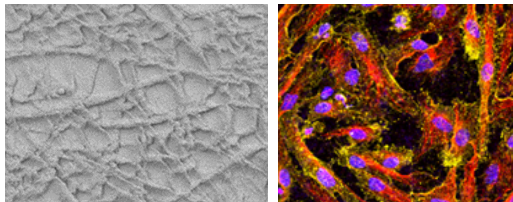
rebuild



BioDrum
Radially aligned nanofiber-dressings to guide biomimetic regeneration of tympanic tissue (DHA)



Biologel
Functionalized hydrogels guide spatially-controlled osteochondral regeneration (DHA)

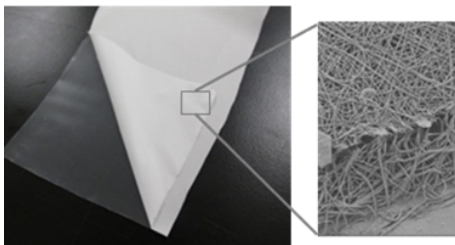


BIOcular
Nanofiber-reinforced hydrogel dressings to support ocular tissue repair and regeneration (Army)

repair

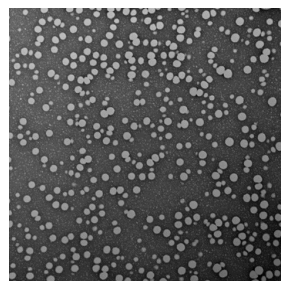
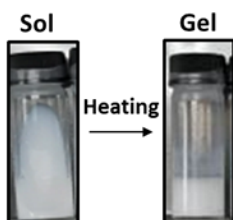


Sprayable Hydrogels
Sprayable biopolymer hydrogels for postoperative adhesion prevention (NIH/NIGMS))



TuneCoat
Nanofiber-based dressings support wound care and provide controlled, localized drug delivery capabilities (Army, DHA)

restore



Resolution
Nanoparticles stabilize critical components of whole blood to enable resuscitation at the point of injury (DHA)

MalariaSHIELD
Thermosensitive hydrogels support the injection of a drug delivery depot for chemoprophylactics (Army)