

**W**ound healing is a complex process that is controlled by a multitude of cells and biological agents. Understanding the wound healing process enables a device development team to create unique solutions to address the unmet needs in infection treatment and prevention, wound monitoring, scar reduction, and functional tissue regeneration.

Southwest Research Institute® (SwRI®) is an independent R&D organization that provides assistance in the development of medical devices and systems. With a staff of more than 3,300, we can assemble a multidisciplinary team to conduct research and/or develop new wound healing and monitoring devices. We manage projects with the understanding that time to market is critical.

## Capabilities

SwRI has extensive capabilities in the following areas relevant to wound care:

- ☐ Mechanical engineering
- ☐ Materials development
- ☐ Tissue engineering
- ☐ Microfluidics
- ☐ Pharmaceuticals
- ☐ Industrial design
- ☐ Electronics
- ☐ Software development
- ☐ Chemical engineering
- ☐ Verification
- ☐ Blood flow imaging
- ☐ Animal studies
- ☐ Human subject research
- ☐ Manufacturing assistance

## Experience

SwRI engineers have experience in the following types of wound care projects:

- ☐ Adhesives
- ☐ Dressings
- ☐ Needles and microneedles
- ☐ Installation systems
- ☐ Negative pressure therapy systems
- ☒ Sensors
- ☐ Drug delivery devices
- ☐ Tissue scaffolds
- ☐ Drug therapies
- ☐ Prosthetic devices

## Certification

SwRI's Bioengineering Section is ISO 13485:2003 certified and compliant with the FDA Quality System Regulation. We have experience developing high-quality documentation for 510K, PMA and EU submissions.





*Southwest Research Institute is an independent, nonprofit, applied engineering and physical sciences research and development organization using multidisciplinary approaches to problem solving. The Institute occupies 1,200 acres in San Antonio, Texas, and provides more than 2 million square feet of laboratories, test facilities, workshops and offices for more than 3,300 employees who perform contract work for industry and government clients.*

**We welcome your inquiries.  
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### **Quality Certifications – SwRI Biomedical Engineering**

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*Benefiting government, industry  
and the public through innovative  
science and technology*

# Wound Care Research and Device Development