



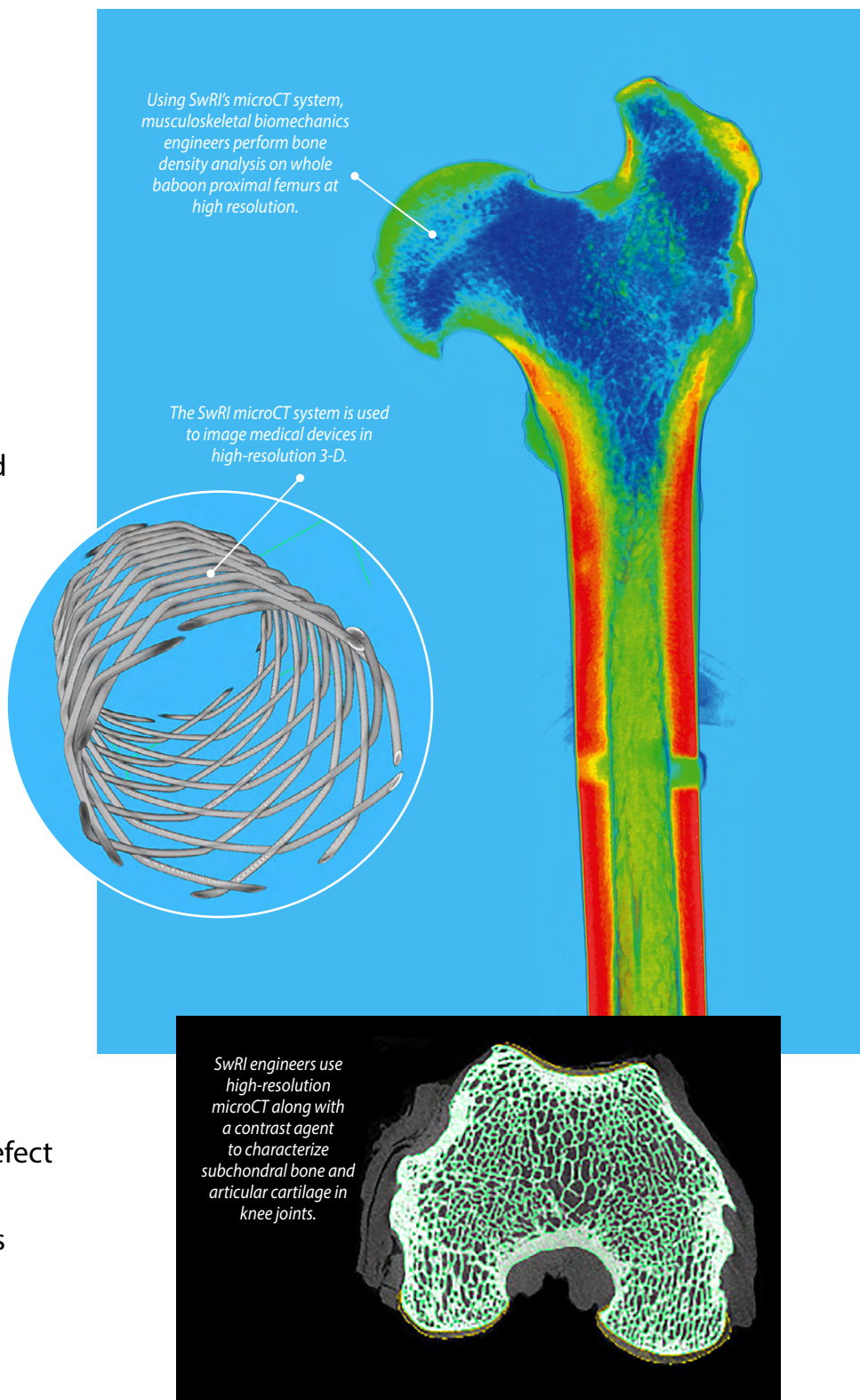
SOUTHWEST RESEARCH INSTITUTE

MicroCT Analysis

Southwest Research Institute® (SwRI®) offers expertise in high-resolution micro-computed tomography (microCT) imaging and analysis. SwRI's advanced imaging system allows high-resolution digital X-ray inspection and microCT imaging of a wide variety of samples, including musculoskeletal tissue and structures, and a variety of polymeric, metallic, and ceramic industrial and medical device components.

Capabilities

- Advanced 2-D X-ray inspection
- 2-D CT slice reconstruction
- CT volume reconstruction for 3-D inspection
- 3-D internal and external surface scanning
- 3-D measurement and analysis of scanned samples
- Morphological and microstructural characterization of partial or whole biological specimens
- Dimensional characterization and defect inspection of medical devices
- Large imaging area for large samples
- High-resolution imaging
- Bone density and quality analysis



Applications

SwRI's biomechanics engineers develop and apply advanced computational and unique experimental techniques to address a variety of musculoskeletal biomechanics-related problems, including:

- Osteoporosis
- Osteoarthritis
- Bone fracture risk
- Musculoskeletal injury risk
- Musculoskeletal implant failure risk



Using SwRI's microCT facility, SwRI engineers investigate the structure-function relationship of whole skeletal structures such as this human lumbar spine.

We welcome your inquiries.

For more information, please contact:

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SOUTHWEST RESEARCH INSTITUTE

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