

## Breakthrough research: Bioengineered human muscle that contracts like real tissue

In what's being hailed as a medical first, researchers at Duke University announced this week that [they had bioengineered human skeletal muscle tissue](#) capable of contracting like the real thing.

The scientists said the lab-grown tissue could become a powerful new tool for studying diseases like muscular dystrophy. In addition, it could facilitate the development of specialized drugs to treat these diseases—and eliminate the need to test the drugs on humans, which can be risky.

“One of our goals is to use this method to provide personalized medicine to patients,” Dr. Nenad Bursac, a professor of biomedical engineering at the university and one of the researchers, said in a written statement. “We can take a biopsy from each patient, [grow many new muscles to use as test samples](#) and experiment to see which drugs would work best for each person.”

The moment of truth came when researchers watched as they stimulated the lab grown muscle fibers with electrical impulses and a range of drugs, including cholesterol-lowering statins and the performance-enhancing drug clenbuterol. Sure enough, the researchers said, the muscle reacted to these stimuli just like native human tissue.

**Read full, original article:** [Scientists Grow Human Muscle That Contracts Like The Real Thing](#)