MORE THAN 6 MILLION BROKEN BONES ARE REPORTED IN THE UNITED STATES EACH YEAR. THE 33 BACK BONES THAT MAKE UP OUR SPINE CAN BE PARTICULARLY VULNERABLE, AND WHEN IT COMES TO SPINAL SURGERY, THE ROAD TO RECOVERY CAN BE A LONG AND DIFFICULT PROCESS.

NOW, DOCTORS AT UNIVERSITY OF MISSOURI HEALTH CARE ARE USING A NEW TREATMENT TO HELP PATIENTS RECEIVING SPINAL SURGERY HEAL MORE QUICKLY.

MU HEALTH CARE’S DR. FASSIL MESFIN SAYS THE NEW FDA-APPROVED PRODUCT, ‘NANOFUSE’, HELPS FRACTURES HEAL MORE QUICKLY. AFTER SPINAL FUSIONS ARE PERFORMED USING RODS AND SCREWS TO ALIGN THE SPINE, NANOFUSE CAN BE USED TO HELP BONE GROW AROUND THE NEW BRACES.

“NanoFuse is placed around the hardware and then the patient usually will form his own bone to create a stable spine.”

THE MATERIAL USED IN NANOFUSE IS A COMBINATION OF DEMINERALIZED BONE AND BIOACTIVE GLASS THAT MIXES WITH THE PATIENT’S BLOOD TO FORM A PUTTY. NEW BONE STARTS FORMING AROUND THE GLASS FIBERS, EVENTUALLY TAKING THE PLACE OF THE GLASS PARTICLES.

“Here is our opportunity to get involved in something that could potentially change the way we do spine surgery.”

I’M CAILIN RILEY, WITH A MIZZOU SPOTLIGHT ON SCIENCE.