FEATURED PROFILE

Ferris Pfeiffer

Dr. Ferris Pfeiffer sets ideas in motion.

As a PhD student at the University of Missouri, Pfeiffer developed a way to convert medical scans into three-dimensional computer models and transport them into a program that mimics body weight and movements. His techniques have been used by doctors to evaluate spinal surgery options. Following his 2007 graduation, he founded his own company offering engineering design, testing and analysis for orthopaedic purposes.

In 2010, Pfeiffer returned to the university as head of Biomechanics and Bioengineering at MU's Comparative Orthopaedic Laboratory. Not long after, he partnered with colleague Dr. Matthew Smith to perfect a minimally invasive surgery for rotator cuff injuries. Now Pfeiffer is collaborating with another colleague, Dr. James Stannard, on a new treatment for a painful joint condition called Osteochondritis dissecans (OCD). Left untreated, OCD can result in chronic swelling and disability; however, many patients are children and adolescents who are not ready for a knee replacement. The new treatment could repair defects with a single graft of cartilage.

Dr. Ferris is an assistant professor with shared appointments in the School of Medicine's orthopaedic surgery department, the College of Engineering's bioengineering department and the College of Veterinary Medicine. He holds five patents.