

UMass Medical School Deploys ADMET Technology in Leading Edge Musculoskeletal Research

Challenge

The University of Massachusetts Medical School has been recognized by national and international medical communities as an outstanding institution for research. Within the university, the Department of Orthopedics and Physical Rehabilitation and the Department of Rheumatology form the Musculoskeletal Center of Excellence. This center researches the prevention, diagnosis, treatment, and rehabilitation of musculoskeletal disorders.

One of the center's research projects, led by Dr. John Wixted, studies fracture biology to validate a device that measures fracture healing properties of various orthopedic implants. Dr. Wixted needed a testing machine capable of determining the load sharing between bones and implants during both tension and compression.

Solution

Dr. Wixted chose an ADMET eXpert 2611 Universal Testing Machine to meet the study's challenges. His team attached special sensors to bone implants used in hip repair and placed them in plastic bone substitutes to determine how much force is applied to both the bone and the implant. ADMET's MTESTQuattro control system allowed the researchers to capture the test data and easily export it to a spreadsheet for further analysis.

Results

Dr. Wixted is delighted with the ADMET relationship. He explains, "I've been very happy with ADMET from a cost basis, ease-of-use, and ongoing support. It does what we need it to do."

As his research program is nearing completion, Dr. Wixted is already using the flexible eXpert 2611 system for other biomechanical applications. Starting on a new application can be daunting, but ADMET's support ensures that customers are able to utilize all aspects of their system. Dr. Wixted was particularly pleased with his interactions with ADMET's support staff: "They've also been very good with the customer service end of things. Whenever I call with a question, they're very good about getting right back to me with an answer."

With its flexible capabilities and ease of use, ADMET's eXpert 2611 Universal Testing Machine will continue to contribute to UMass Medical School's reputation for research excellence well into the future.



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