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FOR IMMEDIATE RELEASE:

For the second time, "Fight Science" brings together members of the crash-test industry, the sports biomechanics industry, and the Hollywood animation industry—applying their combined expertise and technology to a diverse range of martial arts techniques, including karate, kung fu, jiu jitsu, tae kwon do, muay Thai, and wushu, among others. The results reveal the comparative strengths, advantages, and limitations of the various martial arts styles as well as a breakthrough combination of technologies. Scientists are able to peer inside a fighter's body in real time using DTS TDAS equipment as well as other crash-test industry products.

"Fight Science" tests and films world-renowned martial artists, hand-picked to represent various disciplines, in a custom-built combination dojo, high-tech lab, and film studio that took over a year to design and build. Are the legends true? Is there such a thing as a death punch? How much force does each fighter exert? With 32 infrared motion capture cameras, three high-definition cameras, and three ultra-high-speed cameras, the studio allows the crash test and biomechanics scientists to measure and map the speed, force, range, and impact of muscles and bones in the fighters' bodies. Patrick Puzzuto, DTS North American Technical Support Expert, was on hand during the filming to lend his expertise.

The motion-capture technique, requiring reflective markers over the fighters' entire bodies, allows for sophisticated real-time three-dimensional models. These results are combined with other data to create separate sophisticated animations of the fighters' bones, muscles, and nerves. "Fight Science" juxtaposes the fighters' movements with their animated selves for unprecedented insight into exactly how the body generates each move.

Over the centuries, martial arts fighters have supplemented their techniques with instruments like staffs, swords, and nunchuk developed to magnify death-dealing potential. "Fight Science" also explores how the designs and techniques of weaponry can exponentially increase an already fearsome fighter's impact, control, and range.

The show will air in 2008 on The National Geographic Channel.