

Chris Welch is a Biomedical Engineer. He started his career in biomechanics in 1991 doing research for the American Sports Medicine Institute. During his fellowship at ASMI, Chris was named Golf Research Coordinator and worked closely with teaching professional Hank Johnson and the laboratory director Glenn Fleisig to put ASMI's golf research program on the map. Some of the pinnacle achievements of his tenure there include a feature article in Golf Digest on foot pressure patterns during the golf swing and a long term product evaluation project for FootJoy World Wide.

In late 1992, Chris left ASMI to take a research engineer job at the Biomotion Foundation in West Palm Beach, Florida. Shortly after starting, he moved into a position of Director of Sports Medicine Research. In addition to continuing to be involved in golf swing evaluation, Chris also became quite involved in baseball research. Working closely with co-medical director of the laboratory, Frank Cook, MD, he developed a program for evaluating performance and injury potential as it pertains to baseball hitting and throwing. The program was utilized to evaluate hundreds of professional baseball players over a period of 3 years at the Biomotion Foundation. In addition to research, Chris was involved in re-designing clinical evaluation software for Motion Analysis Corporation as well as developing techniques for integrating motion, force and emg data.

In 1995, Chris started a biomechanics specific company called Human Performance Technologies. HPT pioneered the concept of clinical biomechanics by bringing 3-D motion analysis out of the laboratory and to the healthcare, training and coaching masses. HPT was the first company to make 3-D motion analysis both applicable and affordable in the clinical environment.

Golf was a primary focus of HPT's technology and service and as a result, Chris worked with many golf instructors, testing students and providing information, including David Leadbetter, Mike Hebron, Mike Adams, Jim McLean and Mike Bentley as well as providing evaluations to PGA professionals Greg Norman, Brad Faxon, Earnie Els, Nick Price, Ray Floyd and Nick Faldo. He has also worked with therapists including Pete Draovitch, Gray Cook, Greg Rose and Mark Verstegen. Chris also provided biomechanical evaluation services to the Golden Bear South Florida tour. The culmination of this work is knowledge of swing biomechanics and a normative data second to none in the industry. The corner stone to Chris's success has been education. In addition to research articles and literature, Chris has been dynamically involved in creating the biomechanics sections of clinical seminars including Dr. David Seaman's Backswing Dynamics and Dr. Greg Rose's Advantage Golf and most recently a biomechanics component to Back to Basics Golf Academy seminar series. In addition to seminars, Chris has also contributed biomechanics information to books published by David Leadbetter, Pete Draovitch and Gray Cook.

In 2001 after serving as President and CEO of HPT for 6 years, Chris moved on to create a new company, welch-e technologies, where he has migrated both the original HPT concept and technology. Since 2001, Chris has worked to improve on the original model, fine tuning the fee structure, data analysis tools and delivery platform. In January 2005, welch-e technologies released "zenolink" and began the process of developing a client base for this very unique biomechanics service/product.

welch-e technologies provides 3-D motion analysis services. The technology service package/product is called "zenolink". Clients, which include doctors, chiropractors, physical therapists, trainers and coaches, collect video of a patient performing a specific activity (ie. golf swing, baseball pitch, tennis serve, running). They then send that video to welch-e technologies labs via some sort of ground shipping or by digital upload. welch-e technologies digitizes the 2-D video into raw 3-D data. Proprietary software is used to first create the anatomical model of the patient performing the activity followed by a biomechanical analysis of functional performance and injury potential. The final analysis data is provided to the client via a secure web based platform.