

**Professor Savio L-Y Woo**  
**W. K. Whiteford Professor and**  
**Director of the Musculoskeletal Research Center**  
**University of Pittsburgh, U.S.A.**

Dr. Savio L-Y. Woo (Ph.D. in Bioengineering, 1971, University of Washington) is the W. K. Whiteford Professor and the Director of the Musculoskeletal Research Center in the Department of Bioengineering at the University of Pittsburgh. Professor Woo's areas of interest are

- Effects of stress and motion on healing and repair of soft tissues
- Theoretical and experimental studies of the nonlinear viscoelastic and mechanical properties of biological tissues.
- Kinematics of synovial joints, including the knee and shoulder, and developing a novel robotic/universal force-moment sensor testing system to assess the roles of various soft tissues.
- Functional tissue engineering approaches involving the use of gene therapy (antisense oligonucleotides) and bioscaffolds, i.e., small intestinal submucosa (SIS) to improve the healing of injured ligaments and tendons.

Dr. Woo has been inducted by the Institute of Medicine (USA), National Academy of Engineering (USA), The United States Committee on Biomechanics (USNCB) and Academia Sinica (ROC). Dr. Woo is also an Olympic Gold Medalist and the winner of the 1998 IOC Olympic Prize for Sports Science.

Leadership roles include presidencies and (chairmanships) of The Orthopaedic Research Society (ORS), The American Society of Biomechanics (ASB), American Society of Mechanical Engineers – Bioengineering Division (ASME), International Society for Fracture Repair (ISFR), and World Council for Biomechanics (WCB).

Dr. Woo's highest societal honors include the Kappa Delta Award – 1983 (ORS/American Academy of Orthopaedic Surgeons); The O'Donoghue Sports Injury Award in 1990 and 1997 (American Orthopaedic Society for Sports Medicine); the H.R. Lissner Award - 1991 (ASME); the Giovanni Borelli Award – 1993 (ASB) and the Muybridge Medal – 1995 (International Society of Biomechanics). In addition, he has honorary membership in five professional societies including the Western Orthopedic Association (WOA), Society for Tennis Medicine and Sports (STMS), Canadian Orthopedic Research Society (CORS), The Herodicus Society and the Argentina Arthroscopic Association.

Dr. Woo has made far-reaching contributions to the fields of biomechanics and sports medicine through his in-depth investigation of the complex function of knee ligaments. He has published **290** refereed journal articles, **125** book chapters, and over **700** abstracts. Dr. Woo has also edited **10** books and **13** conference proceedings and has given over **770** invited lectures, both nationally and internationally.