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SATURDAY: JUNE 27, 2020

10:00 AM (New York) | 3:00 PM (London) | 4:00 PM (Europe) | 10:00 PM (Beijing)

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INAUGURAL DISTINGUISHED WEBINAR



Savio L-Y. Woo, Ph.D., D.Sc., D.Eng.
Founding President, WACBE

“Academic Career in Translational Research:
Development, Growth, Maturation, Advocacy
and Prognostication”

In this Webinar, Dr. Woo will summarize his five-decades of work on Translational Research and share his personal experience and philosophy on how to develop a successful career in academia.

The first decade (1970-1980) of his **academic career** was for **development**, which began with finding a great mentor in Professor Y. C. Fung. As a faculty member of both the Departments of Orthopaedics and Bioengineering at the University of California at San Diego (UCSD), he learned to collaborate with biochemists, clinicians, and surgeons to identify and solve clinically relevant musculoskeletal problems. The lasting impact was the concept “Controlled Motion is Good”.

In the second decade (1980-1990), Woo experienced significant **career growth**. At his Orthopaedic Bioengineering Laboratory, his students and colleagues discovered the MCL could heal spontaneously and successfully without surgery and changed the paradigm for clinical management from surgery to functional treatment of extra articular ligaments. By mid-decade, Woo was assisting Fung with a number of professional organizations that included the World Congress for Biomechanics. He also served as the President of the Orthopaedic Research Society (ORS) and the American Society of Biomechanics (ASB) as well as the Chairperson of the Bioengineering Division (BED)/American Society of Mechanical Engineers (ASME).

Woo’s **career maturation** began with his move to the University of Pittsburgh in 1990 where he established the Musculoskeletal Research Center (MSRC). He recruited and directed a very large group of biologists, bioengineers, clinicians to work together in a seamless manner on translational research. One example was to employ robotic technology to study a number of key variables in ACL reconstruction in order to improve this surgical procedure on a scientific basis. Woo also succeeded Fung as the Chair for the U.S. National Committee of Biomechanics (USNCB) and the World Council for Biomechanics (WCB).

In the new millennium (2000-2010), Woo and colleagues at the MSRC **advocated** the importance of **functional tissue engineering** (FTE) by incorporating biological factors to complement appropriate mechanical conditions to heal knee ligaments more successfully. Woo also founded the International Symposium of Ligaments & Tendons (ISL&T) in 2000 and the World Association for Chinese Biomedical Engineers (WACBE) in 2002 to further advocate the importance of the bioengineering profession.

In the current decade, FTE was innovated to regenerate an injured ACL by adding novel biodegradable metallic materials. Meanwhile, colleagues and students have frequently asked him to **prognosticate** on the future of bioengineering. He will present some of his thoughts/views on the significant role bioengineers will play on finding successful clinical solutions.



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