

Special Issue: A Tribute to Dr. Y. C. Fung

This September we celebrate the 100th birthday of Professor Y. C. Fung, the Father of Biomechanics. There are multiple events organized in the biomechanics and biomedical engineering communities in honor of Professor Fung, including the YC Fung symposium at the Summer Biomechanics, Bioengineering and Biotransport Conference (SB³C2019) in Seven Spring, PA in June and the YC Fung symposium at San Diego, CA in September. A special issue has been published by the *Journal of Medical Biomechanics* [1]. The ASME *Journal of Biomechanical Engineering* organized this special issue titled “Special Issue: A Tribute to Dr. Y. C. Fung,” to celebrate Dr. Fung’s birthday and his contributions to science and engineering.

Dr. Fung has been a singular pioneer in the field of Biomechanics, establishing multiple biomechanical theories and paradigms in various organ systems, including the heart, blood vessels, blood cells, and lung [2]. He has mentored and trained many researchers in the biomechanics and bioengineering fields. His books on biomechanics [3–5] have become the classic biomechanics textbooks for students and researchers around the world. Dr. Fung is a member of all three U.S. National Academies—National Academy of Sciences, National Academy of Engineering, and National Academy of Medicine. He is also a member of the Chinese Academy of Sciences and a member of Academia Sinica. He has received many awards including the Timoshenko medal, the Russ Prize, and the National Medal of Science.

This Special Issue includes 19 invited papers from Dr. Fung’s colleagues, former students and trainees, as well as several “YC Fung Young Investigator Award” recipients. The issue begins with expert views from Dr. Shu Chien and Dr. Savio Woo, summarizing Dr. Fung’s lifetime achievements. There are 17 research papers and review articles, covering advances in cardiovascular biomechanics, soft and hard tissues (ligament, bone, hearing, and reproductive system) biomechanics, and cell biomechanics. These papers also demonstrate the long-lasting impacts of Dr. Fung’s pioneer works, including the Fung exponential strain energy function [2,5], cell and tissue biomechanics, tissue growth law, and tissue engineering [2,4]. These research activities continue expanding the biomechanics legacy of Dr. Fung. We hope that

this special issue provides readers with a glance of the history and current trends in biomechanics.

We thank all the authors for their contributions to this special issue, the ASME *Journal of Biomechanical Engineering* for organizing this Special Issue, the journal editors Dr. Victor Barocas and Dr. Beth Winkelstein for their support to this Special Issue, and the reviewers for their thorough assessment of manuscripts in a timely fashion.

Happy Birthday Dr. Fung!

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