

# WACBE WEBINARS

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## SATURDAY: JUNE 26, 2021

9:00 AM (New York) | 2:00 PM (London) | 3:00 PM (Europe) | 9:00 PM (Beijing)

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### DISTINGUISHED BIOMEDICAL ENGINEERING WEBINAR



“Biomechanics Research from Blood Flow to Hearing –  
A 40 Year Academic Career”

Rong Z. Gan, PhD  
University of Oklahoma

#### ABOUT THE WEBINAR

In this Webinar, Dr. Gan will summarize her 40-year academic career in biomechanics from blood flow in lung to hearing research. In 1978 when graduate education was resumed in China and after working in a car manufacturing company for 10 years, she became one of the first graduate students to study Biomechanics introduced by Professor Y.C. Fung. Her research strength in tissue and organ biomechanics (1980-1995) was in measurement of rheological properties of the blood and blood vessels, mathematical modeling of blood flow in arteries, and physiological and pathological studies of pulmonary blood flow in dogs. Since 1995, Dr. Gan has extended her research into a new field and developed a truly transformational research program at the University of Oklahoma in Biomechanics for Protection and Restoration of Hearing, including implantable hearing devices, dynamic properties of ear tissues, auditory function tests, and computational modeling of sound and blast wave transmission through the ear. Her 40 years of academic career (1981-2021) has demonstrated that biomechanics provides a foundation for understanding the structure-function relationship for the cell, tissue, organ and system of human body and leads her research success from blood flow to hearing.

#### ABOUT THE SPEAKER

**Rong Z. Gan, PhD**, *George Lynn Cross Research Professor; Charles E. Foster Chair; Presidential Research Professor in Biomedical and Mechanical Engineering, University of Oklahoma*

Rong Z. Gan, Ph.D., is the George Lynn Cross Research Professor, Charles E. Foster Chair, and Presidential Research Professor in Biomedical and Mechanical Engineering at the University of Oklahoma and a fellow of AIMBE. She received her BS degree in Mechanical Engineering and MS in Biomechanics from Huazhong University of Science & Technology in 1968 and 1981, respectively. Her 2nd MS degree is in Applied Mathematics from University of Alberta (1988) and PhD in Biomedical Engineering from University of Memphis (1992). After early research in cardiopulmonary area, she joined Hough Ear Institute (1995) and the University of Oklahoma faculty (1999) and developed a truly transformational research program in Biomechanics for Protection and Restoration of Hearing funded by NIH, DOD, NSF, Whitaker Foundation, and Oklahoma State. Her research has resulted in numerous publications and led to breakthroughs in implantable devices, computational modeling, and therapeutics for hearing restoration with 4 patents.



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