

## **Dr. Wei R. Chen**

### **Email:**

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### **Education:**

#### **Ph.D. Physics**

University of Oregon, Eugene, Oregon, 1988

#### **B.S. Physics**

Shandong University, Jinan, Shandong, China, 1982

### **Biography:**

Wei R. Chen is Professor and Stephenson Chair of Biomedical Engineering of the Stephenson School of Biomedical Engineering at the University of Oklahoma. He received his BS degree in physics from Shandong University in China in 1982 and PhD degree in theoretical high-energy particle physics from the University of Oregon in 1988.

Dr. Chen joined the faculty of the Department of Engineering and Physics at the University of Central Oklahoma (UCO) as an assistant professor in 1999. He was promoted to associate and full professor in 2001 and 2005, respectively. He served as the Assistant Dean (2006-2015), the Interim Dean (2015-2016), and the Dean (2016-2020) of the College of Mathematics and Science at UCO.

Dr. Chen changed his research focus from particle physics to cancer treatment in 1994. He is the co-inventor of laser immunotherapy (LIT), a novel treatment method for metastatic cancers. LIT combines local laser irradiation and local administration of immunological stimulants to induce systemic antitumor immune responses. In pre-clinical studies and preliminary clinical trials, LIT has shown the ability to destroy treated local tumors while eliminating untreated distant metastases. Dr. Chen and his collaborators have developed LIT from a simple benchtop concept to a potential bedside clinical tool, with promising outcomes in preliminary clinical trials for melanoma and breast cancer. He is also the inventor of immunologically modified carbon nanotubes for nanotechnology-based photo-immunotherapy for cancer treatment.

Dr. Chen has published more than 160 peer-reviewed articles and more than 180 conference proceeding papers. He has been awarded 9 US patents and multiple international patents. Dr. Chen has received more than \$7 million in funding from state and federal agencies, foundations, as well as industrial sponsors. Dr. Chen established in 2006 and since then has served as the chair of the International Conference



“Biophotonics and Immune Responses” at Photonics West of SPIE (International Society of Optics and Photonics). He was elected as an SPIE Fellow in 2007. He has helped organize more than 100 international conferences and has been an invited speaker at institutions on five continents. In 2018, Dr. Chen was selected as an invited speaker on “A Local Interventional Laser Irradiation and Immunological Stimulation to Induce Systemic Anti-Tumor Immunity”, at the Gordon Research Conference “Laser in Medicine and Biology”.

Dr. Chen has been dedicated to education for more than 30 years. He has supervised four postdoctoral fellows and numerous visiting scholars. He has mentored more than 100 undergraduate and graduate students on cancer research. In 2010, he established the Center for Interdisciplinary Biomedical Education and Research at UCO and has served as its director until 2020. He received the 2008 US Professor of the Year award. He was the recipient of the 2011-2012 US Fulbright Lecturing/Research Award. He also won the Medal for Excellence in Teaching from the Oklahoma Foundation for Excellence in 2011. In 2012, Dr. Chen received international recognition as a recipient of the SPIE Educator Award. He looks forward to continuing his academic excellence at the University of Oklahoma.