



Tadashi Yamaguchi PHD

**Professor, Center for Frontier Medical Engineering
Chiba University
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Education

2001: Ph.D (Dr. Engineering), Graduate School of Advanced Integration Science, Chiba University, Japan

1998: Master Degree, Graduate School of Engineering, , Chiba University, Japan

1998: Bachelor Degree, Faculty of Engineering, , Chiba University, Japan

Professional Experience

2013-Present: Vice Director, Professor, Center for Frontier Medical Engineering, Chiba University, Japan

2008-2013: Associate Professor, Research Center for Frontier Medical Engineering, Chiba University, Japan

2007-2008: Associate Professor, Graduate School of Advanced Integration Science, Chiba University, Japan

2003-2004: Visiting Researcher, Bioacoustics Research Lab, University of Illinois, USA

2001-2007: Assistant Professor, Faculty of Engineering, Chiba University, Japan

Honors & Awards

Paper Award, Medical Imaging Technology, 2015, 2016

Paper Award, Journal of Ultrasound in Medicine, 2011, 2013

Prof. Yamaguchi has been comprehensively practice the multiple studies on realizing the aims, macro quantitative diagnosis from microscopic tissue examination by ultrasound of the "no-invasive biopsy, pathological diagnosis by ultrasound only.

He is in the past, as part of the medical diagnosis support technology development, as a target in vivo and excised liver, and practice the measurement and analysis of using the ultrasound of a few MHz ~ several hundred MHz band, fat in liver caused liver and hepatitis, and the difference in acoustic properties in the liver parenchyma and other tissues make it possible to determine at the cellular level. In addition, by using the ultrasonic frequency



band of a typical ultrasonic diagnostic apparatus level, the difference in nature of the structural units, including tissue density and size are practically detectable diagnostic algorithm with high precision.

From 2010, aims to utilize the results in the treatment assistance, the lymph nodes with more complex organizational structure, which performs the same examination as compared to the liver using ultrasound high frequency, excised It has established a cancer metastasis judgment technology in the acoustic characteristics analysis and structural units at the cellular level in have been human lymph nodes.

- Fellow, Japanese Society of Ultrasound in Medicine (JSUM)
- Committee, Society for the study of Ultrasound, The Acoustical Society of Japan (ASJ), Society for the study of Ultrasound, The Institute of Electronics, Information and Communication Engineering (IEICE)