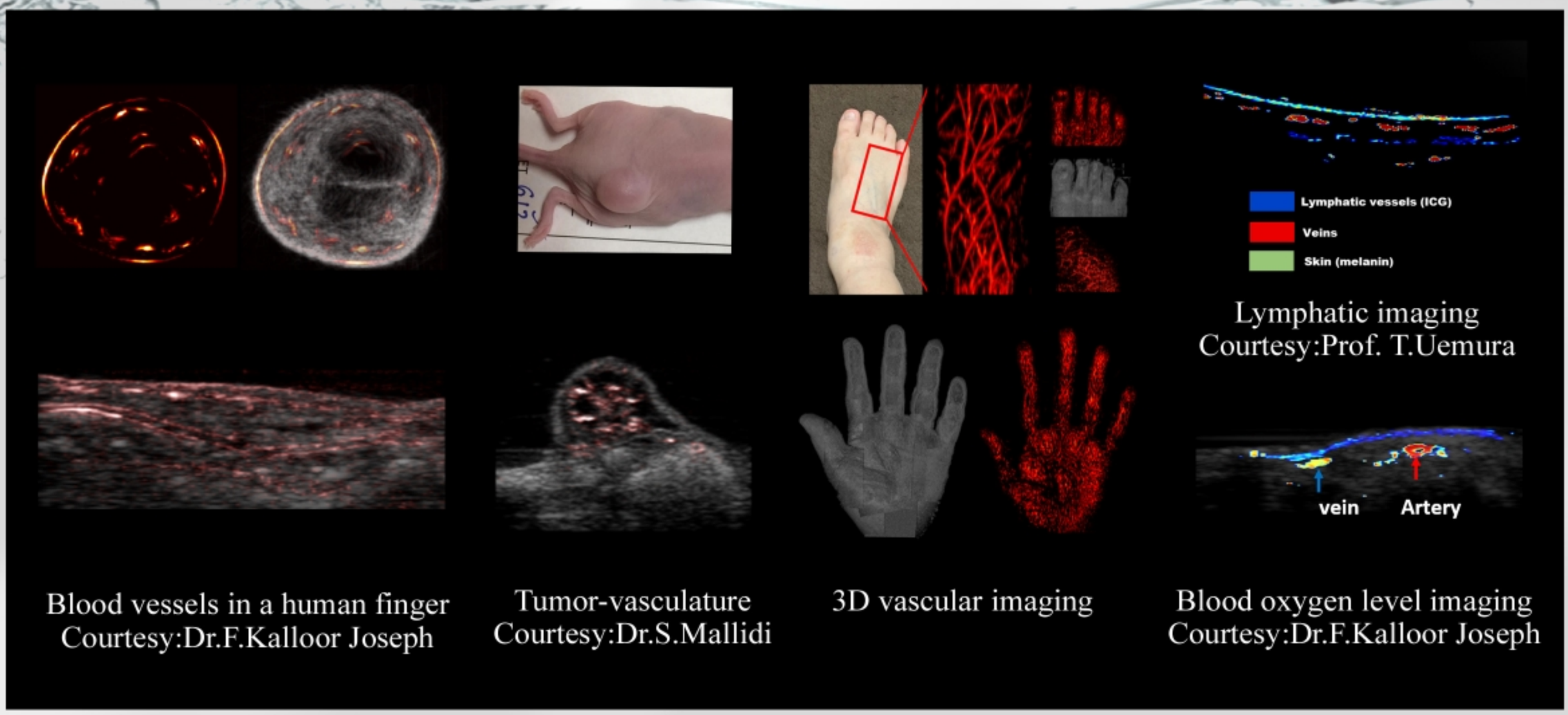
AcousticX

CYBERDYNE LED

Japanese Quality

Photoacoustic Imaging System Using LED Light Source

Wide selectable optical wavelength range, multispectral analysis for functional imaging, 3D volumetric analysis, portability, and no need of laser - safe rooms and eye-safety goggles



Blood vessels in a human finger
Courtesy:Dr.F.Kalloor Joseph

Tumor-vasculature
Courtesy:Dr.S.Mallidi

3D vascular imaging

Lymphatic imaging
Courtesy:Prof. T.Uemura

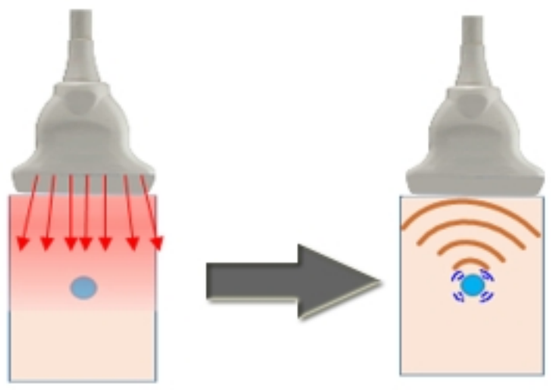
Blood oxygen level imaging
Courtesy:Dr.F.Kalloor Joseph

AcousticX

CYBERDYNE LED

LED array light source Photoacoustic Imaging System

Principle of photoacoustic imaging



Illuminated pulsed light while scattering through tissue is absorbed at specific locations by molecules such as hemoglobin in blood. The absorbed optical energy leads to generation of ultrasound that can be detected at surface of the tissue. The acquired signals are then used to reconstruct the location and spatial details of the absorber.

Specification :

Maximum depth	40mm
Light source	High Density High Power LED
Wavelength	690,750, 820, 850, 940nm, Combination: 690/850, 750/850, 820/940 Frequency: selectable among 1,2,3,4kHz Pulse Width : selectable from 30ns through 150ns
Driver ports	4
Transducer	Selectable from 7MHz or 10MHz Linear array transducer
PA processing channels	128ch parallel receiving
Scan mode	Photoacoustic 2D, Ultrasound 2D
External trigger output	For pulsed laser system
Power	AC 100 V - 240 V
Monitor	Color LCD
Software	3D imaging package(Integrated automatic
Option	stage), Oxygenation package, High Speed PA imaging package, Raw data accessible
Environment	No protective goggles needed No need to define laser class

CYBERDYNE

CYBERDYNE, INC.

2-2-1 Gakuen-Minami, Tsukuba,

Ibaraki, 305-0818 Japan

(Tel/Main)+81-29-869-8448

(Fax) +81-29-855-3181

https://www.cyberdyne.jp/english