



# **Light-CT Scanner**

## **Fast Tissue Imaging System**

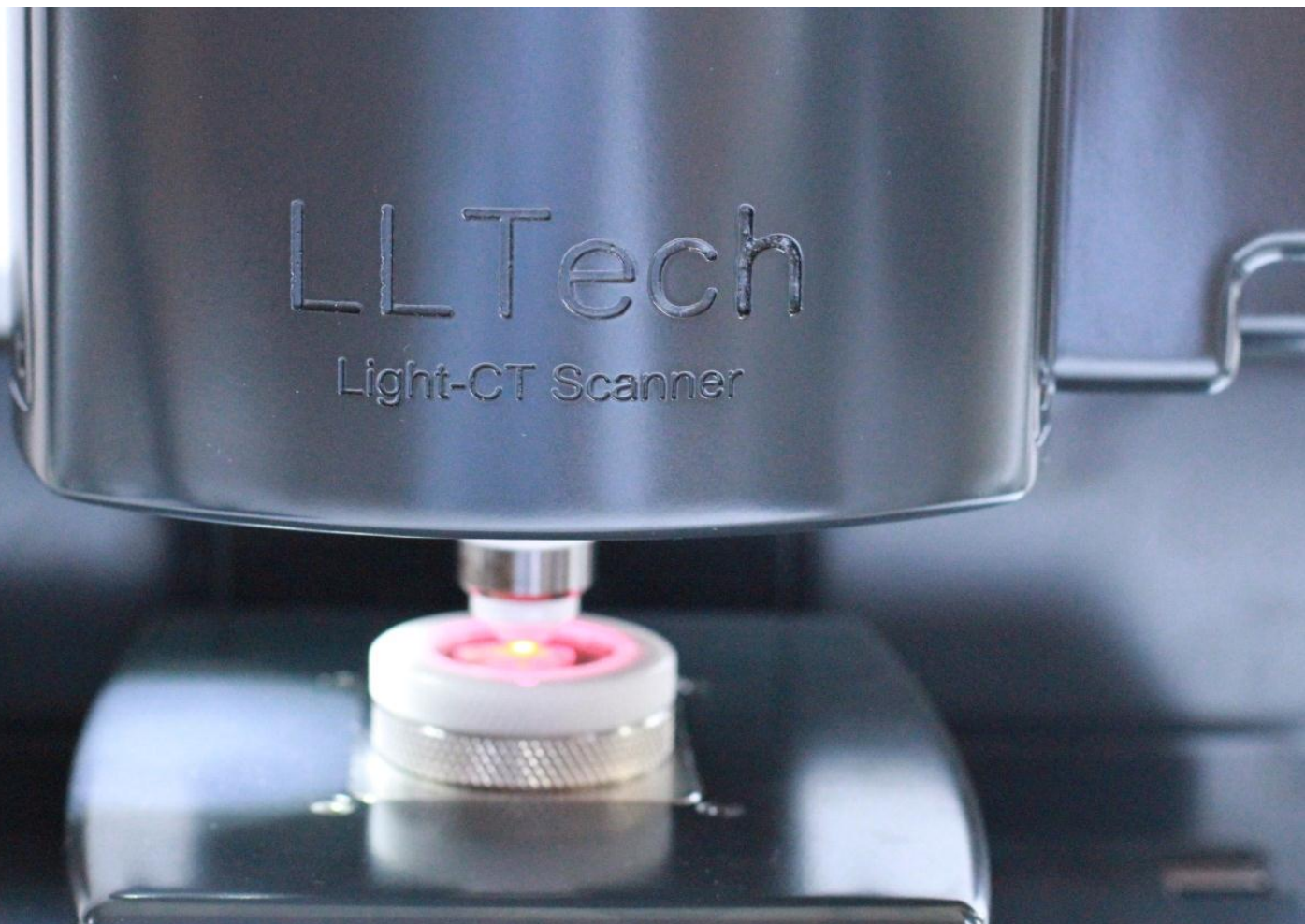
**Fast optical in-depth biopsies of gross tissue**

**1  $\mu\text{m}$  2D and 3D histopathological resolution**

**Easy exploration, acquisition and rendering**

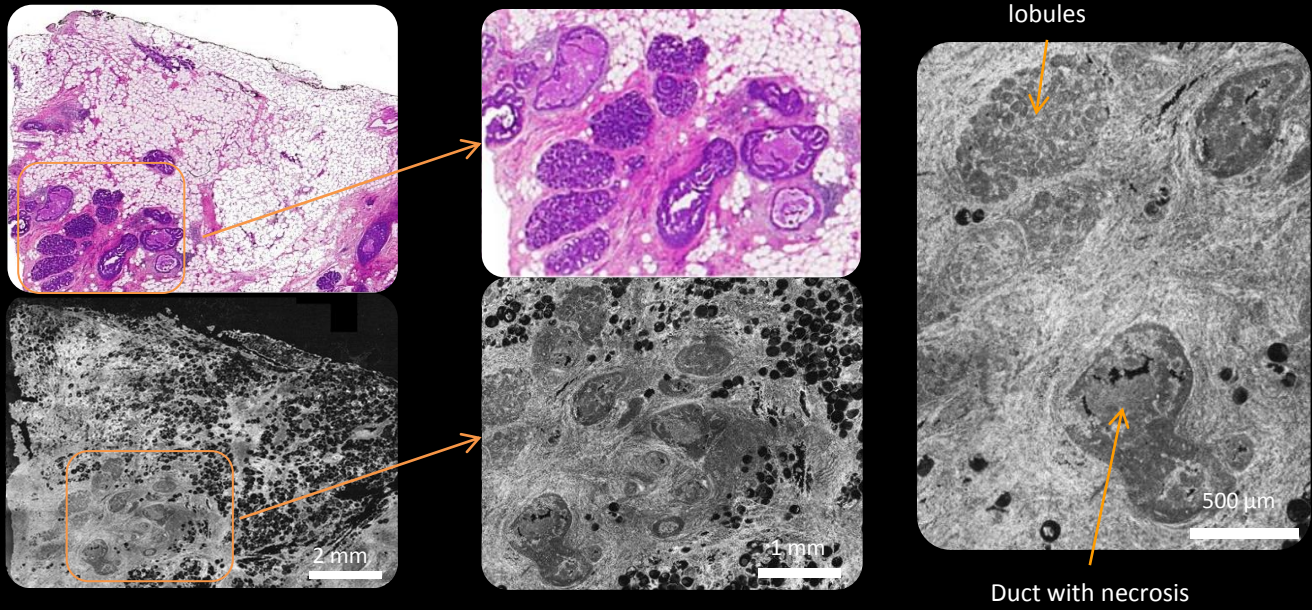
**DICOM format**

**Safe, non-invasive and non-destructive process**

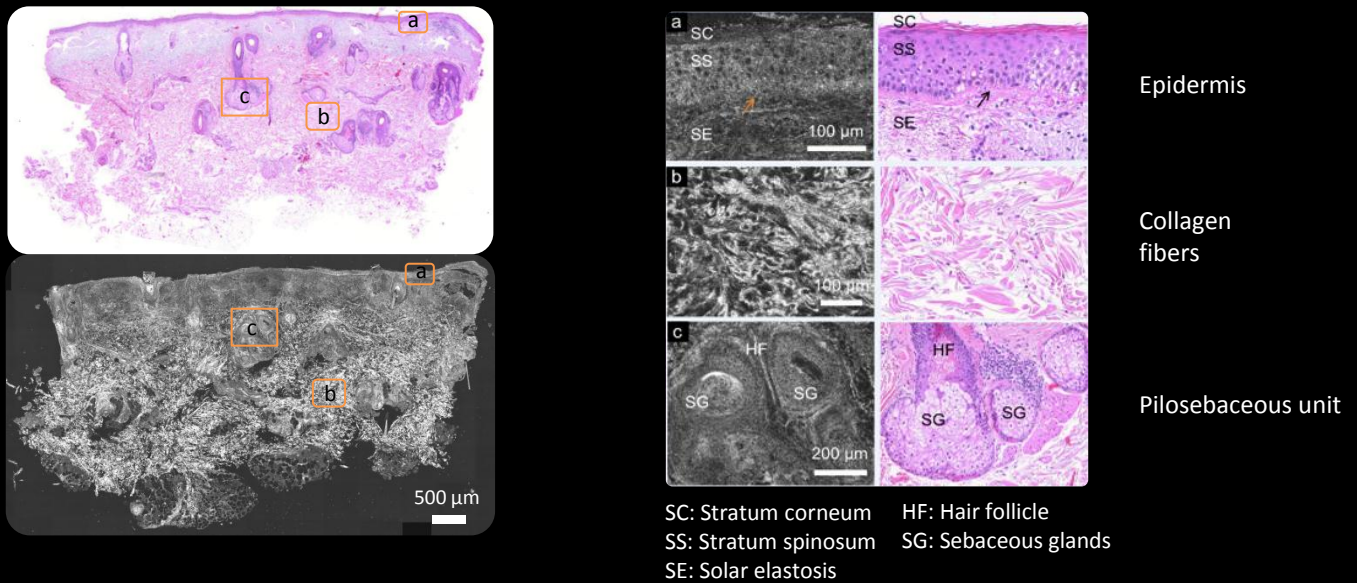


# Histopathological resolution capability for clinical and pharma research

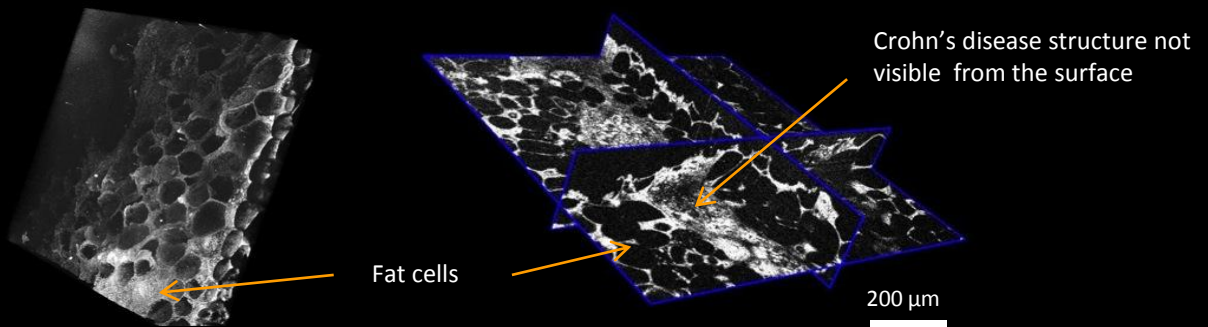
Human breast : Ductal carcinoma in situ – pathological features corresponding to histology



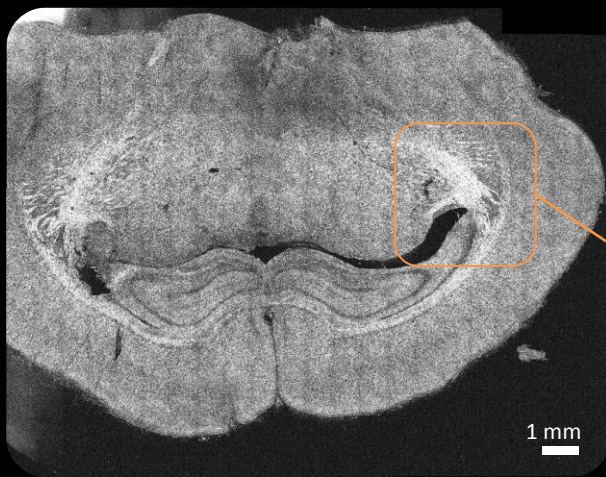
Human skin – layers and microstructures visible



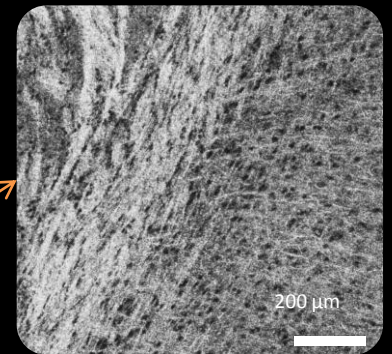
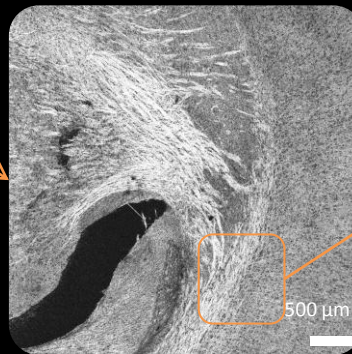
Human intestine - Crohn's disease visualized in 3D



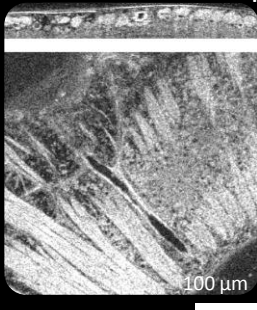
# Small animal imaging and embryology in 2D or in 3D



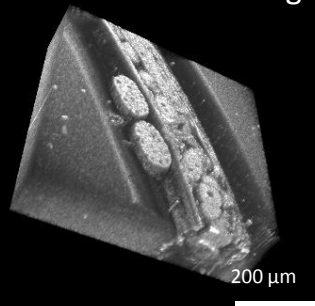
Rat brain at various scales (showing axons)



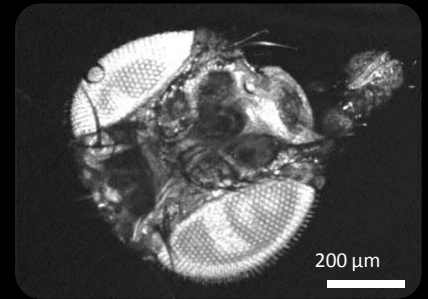
Rat retina



C. elegans



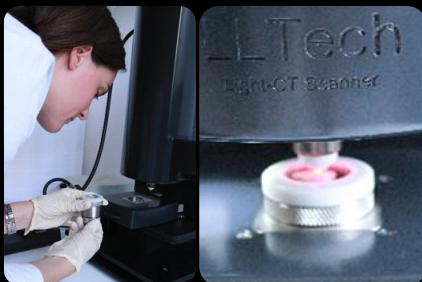
Fruit fly



## Fast, easy and non-invasive tissue imaging and examination

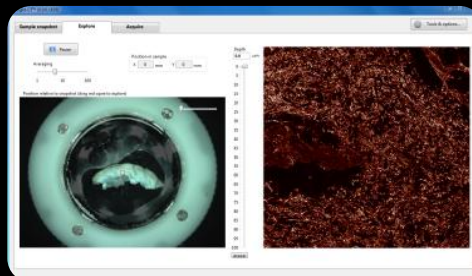
Whole process: 1 cm<sup>2</sup> in less than 5 minutes

Prepare sample



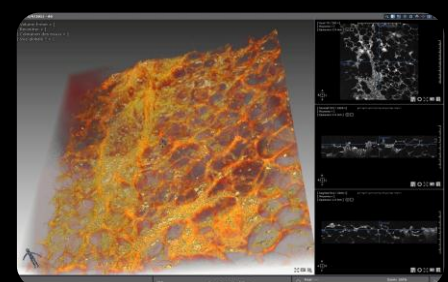
The user places the sample in the sample holder and inserts it in the system

Acquire images



The user selects the area to be scanned from the wide field image and launches the automatic scanning

View and analyze images



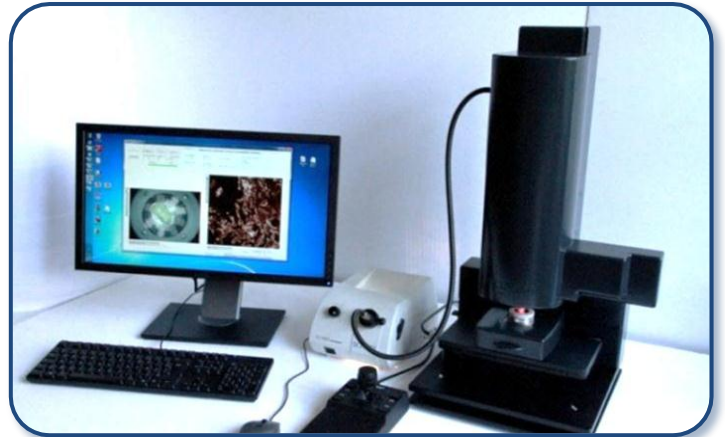
- DICOM viewer (2D and 3D rendering)
- Image database
- Export to various formats: DICOM, TIF, JPEG, GIF...

The Light-CT™ optical coherence tomography system combines white light interferometry principles with microscope resolution capability, in order to provide en-face images below the surface of biological samples.

Light-CT™ is the only technology enabling one micron cellular resolution imaging in all 3 dimensions at significant clinical depths. It does not require tissue preparation, nor modification, nor staining of any kind, unlike conventional histology slide preparation.

The technique is particularly suitable for:

- Fast tumorous tissue assessment
- Triage, biobanking
- Embryology, neurology, small animal (rat, drosophila, C. elegans, etc.)
- 3D imaging of matrigels, scaffolds
- Precious or fragile tissue (stem cells, ophthalmic tissue)
- Cosmetology



Light-CT™ Scanner technical data	
<b>Dimensions</b>	310 x 360 x 700 mm
<b>Weight</b>	20 kg
<b>Main input voltage, frequency and current</b>	100 to 240 V ~AC, 50 to 60 Hz, 3A
<b>Compliance to international standards</b>	OC IEC 61010-1 OC IEC 61326-1 CE - Device sold under Research Use Only
<b>Axial resolution</b>	1 µm
<b>Transverse resolution</b>	1.5 µm
<b>Field of view</b>	0.8 mm x 0.8 mm
<b>Maximum sample size</b>	27 mm diameter x 5 mm height
<b>Penetration depth</b>	200 µm to 1 mm
<b>Frame rate</b>	35 Hz
<b>Snapshot camera resolution (for widefield sample image)</b>	50 µm
<b>Image formats</b>	DICOM; export to JPG, TIFF, PNG

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