

## ■ Our Mission

ClearLight empowers researchers to see more biology within the tissue microenvironment leading to improved diagnostic, prognostic, and predictive treatment of disease so we can all live healthier lives.

## ■ Overview

ClearLight Biotechnologies provides contract research and development services to pharmaceutical companies who seek to improve the efficacy of potential drug candidates. The company provides pharmaceutical, biotechnology, and academic researchers with CLARITY Tissue Clearing, 3D immunostaining, and Tru3D image analysis services. The company is developing an automated instrumentation platform based on the CLARITY lipid-clearing technique developed by Dr. Deisseroth and colleagues at Stanford University. For more information, visit the ClearLight website at <https://clearlightbiotechnologies.com/>

## ■ Fast Facts

**Founded in 2015** by Karl Deisseroth MD, PhD

**Early stage private company** backed by Wieggers and affiliates, Pivotal and KESA Partners

**Experts at CLARITY Tissue Processing**, thick tissue antibody staining, and Tru3D tissue analysis

**Provides research use only lab services** to pharmaceutical, biotechnology and academic researchers

**Developing next-generation tissue processing** and image analysis platform to facilitate 3D analysis of preclinical and clinical models of disease

## ■ Our History & Commitment

ClearLight Biotechnologies (formerly ClearLight Diagnostics, LLC) was founded in 2015 by Karl Deisseroth MD, PhD, the inventor of CLARITY, Optogenetics, and STARmap technologies. It is an early stage company focused on developing automated instrumentation and associated reagents to simplify and expedite non-destructive 3D tissue analysis to facilitate preclinical and clinical research applications. The platform will enable an end-to-end solution for 3D analysis of preclinical and clinical models of disease.

## ■ The ClearLight Difference

- ◆ Worldwide license for diagnostic and clinical use of CLARITY method from Stanford University
- ◆ Exclusive worldwide license to develop and commercialize CRYSTAL method (Active CLARITY)
- ◆ CLARITY and CRYSTAL enable the clearing process to be expedited in a controlled manner, making the process amenable to automation
- ◆ Expertise at thick tissue antibody staining using a wide selection of validated Ab stains optimized to penetrate deeply into tissues
- ◆ Tru3D Tissue Analysis allows pathologists and drug researchers to see more biology than is currently possible with traditional 2D FFPE thin section methods
- ◆ CLARITY based tissue clearing services offer 10x more contiguous and more meaningful data as compared to current gold standard 2D FFPE thin-sections
- ◆ Proprietary AI software to analyze 3D images (under development)

## ■ Accolades

ClearLight and researchers at the Indiana University's Melvin and Bren Simon Cancer Center collaborated on the publication of "Three-dimensional Imaging and Quantitative Analysis in CLARITY Processed Breast Cancer Tissues." This paper received an award as one of the top 100 downloaded cancer papers on Nature.com Scientific Reports in 2019.

## ■ Contact Us

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