BIONOVA X

Lighting up high resolution,
high throughput 3D bioprinting

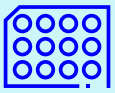
Create the future of health

CELLINK
A BICO COMPANY

Features Designed For Your Success

Ultra High Resolution

Print down to **10µm** resolution enabling effortless microarchitecture bioprinting

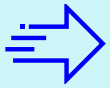


Direct in-Well Printing

High-throughput culture and assay ready, no sample transfer needed in **6, 12** or **24** well-plates

Cell Friendly Printing

Leveraging a 405nm light source for minimal damage to cells during printing.

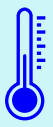


Unparalleled Speed

Utilizing a patented continuous printing technology print faster than ever before without sacrificing print fidelity.

Auto Alignment

No manual alignment or focusing needed



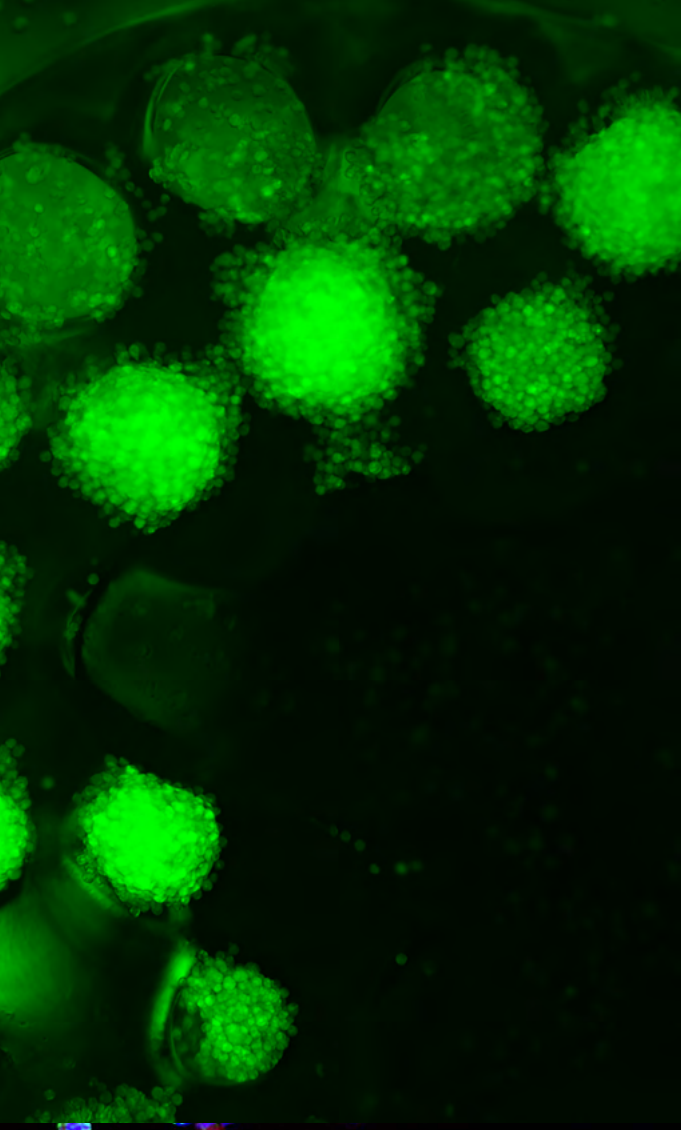
Temperature Control

Provide optimal printing conditions for your bioinks

Accelerating Your Research

Accelerating your research in Biomimetic Models, Regenerative Medicine, Precision Medicine and Disease Modelling.

We offer the world's first digital light processing (DLP)-based bioprinter for direct printing in multiwell plates. Our rapid 3D bioprinter can print complex 3D structures, with superior resolution, speed, flexibility and scalability from computer aided design (CAD) models or medical images. The visible light-induced polymerization mechanism also allows for the incorporation of various cell types with functional biomaterials to directly print functional tissue models in a matter of seconds. Strengthening research with high resolution, reproducibility and high speed light based bioprinting across key application areas setting up for convenient downstream analysis.



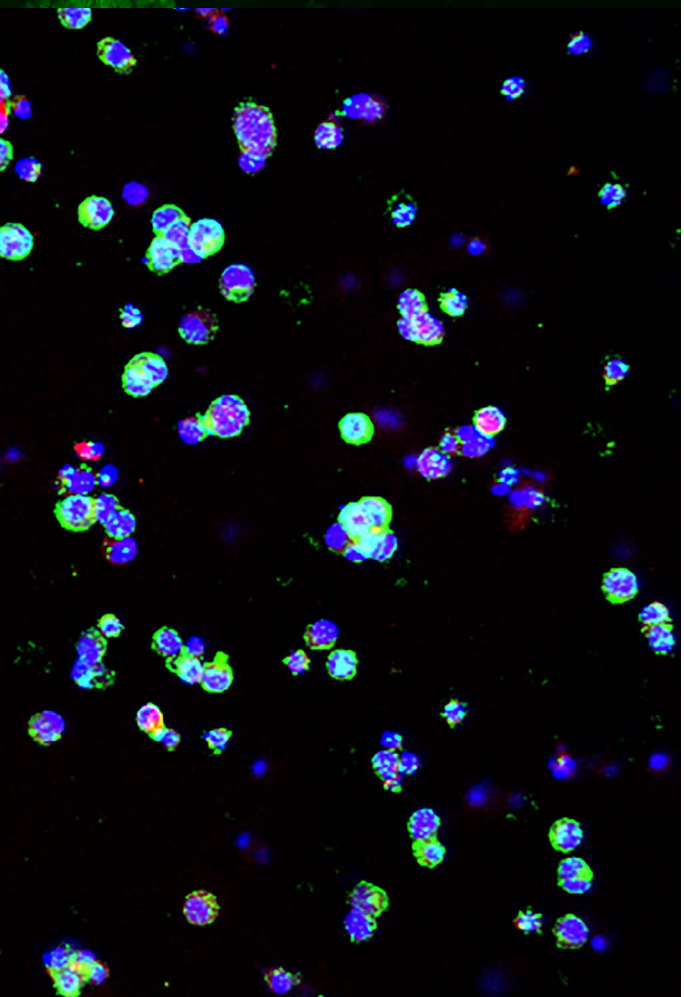
REGENERATIVE MEDICINE

From medical images to 3D Models

- Print implantable scale devices fit to patient requirements for personalized therapies
- Develop constructs with the physiologically relevant biomechanical properties

Spinal Cord

Peripheral Nerve



BIOMIMETIC MODELS

Effortlessly recapitulate in vivo biomechanical properties

- Regionally vary stiffness with grayscale printing to create gradients mimicking *in vivo* conditions.
- Print with cells at high speed, maximizing cell viability.

Liver

Nerve

Heart

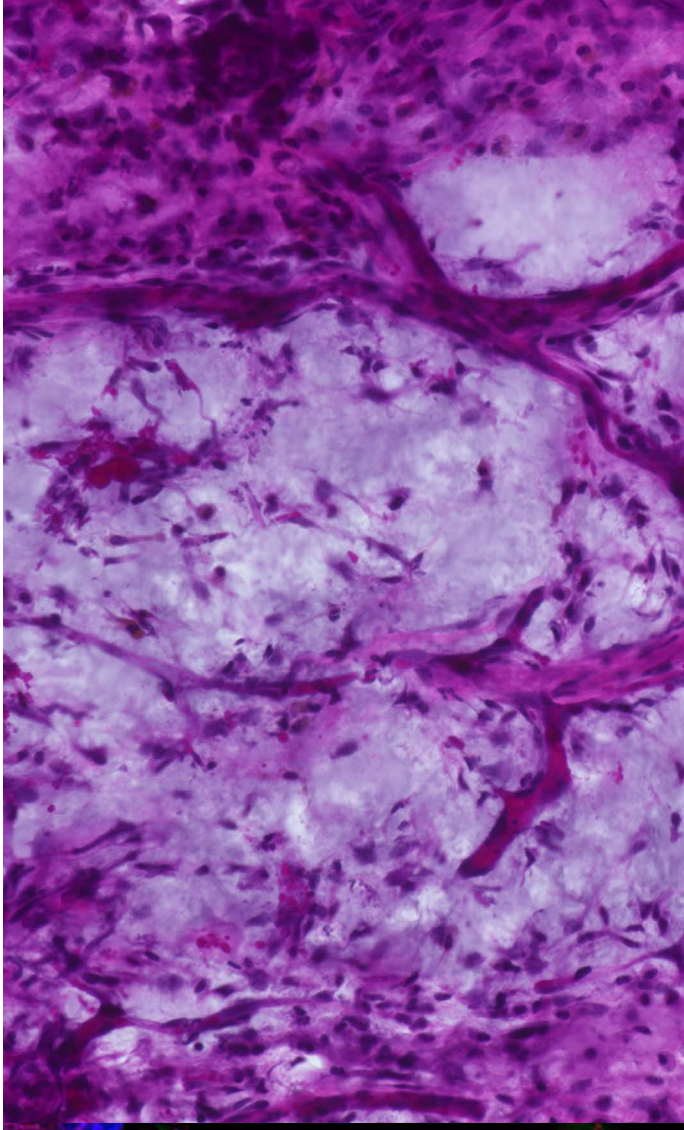
PRECISION MEDICINE

Drive vascularization for more meaningful tissue engineering

- Consistent fabrication of lumen like structures
- High speed printing for cell-based constructs

Liver

Vascularized Tissue



DISEASE MODELLING

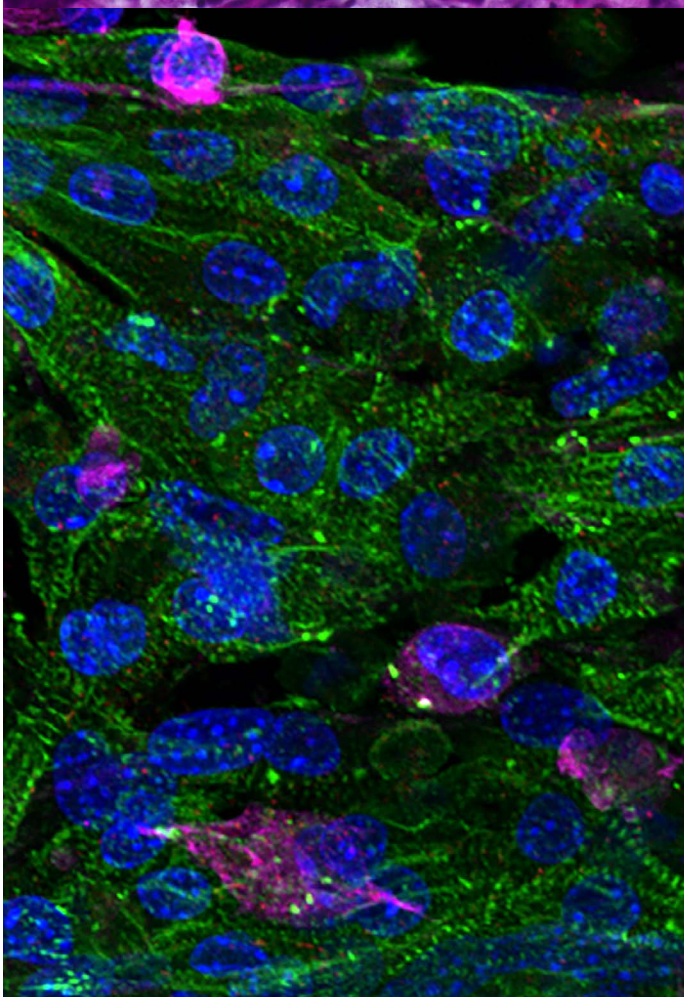
Control microarchitecture to recreate disease like conditions

- Develop models that direct cell behaviour to model disease like conditions
- Print in up to 24 well plates for high throughput screening assays
- Create models ideal for long term tissue maturation

Cardiac

Kidney

Cancer



Streamlined Operation

Exceptional design to maximize output and efficiency

Easily Fits in a Biosafety Cabinet

Built in computer for seamless protocol set up

Built-in UVC Sterlization for optimal sterility

Glove Friendly 10″ Touch Screen

User-Friendly Interface

Supports STL files as well as image files

Specifications

3D Bioprinting technology	Direct in-well layerless printing with digital light projection-based technology	
Printing resolution (XY)	10 µm	
Z-precision (motor driven)	4 µm	
LED wavelength	405 nm (FWHM ±7.5nm)	
Intensity range	4-16 mW/cm2	
Heater temperature	Room temperature to 60 °C	
Well plate format	24 well plate, 12 well plate, 6 well plate	
Build volume	24 well plate	63.6 mm2 (Ø 9 mm) x 6.5 (Z) mm
	12 well plate	9.0 mm (X) x 9.0 mm (Y) x 9 mm (Z)
	6 well plate	19.2 mm (X) x 10.8 mm (Y) x 9 mm (Z)
Build plate calibration	Auto alignment	
Display	10″ touch screen, glove friendly	
Connectivity	1x USB port (type A)	
Software	On-board software	
Support file types	.stl, .png, .bmp, .jpg	
Sterility	UVC sterilization of chamber (270 ± 10nm)	
Dimensions	20.3″ (W) x 15″ (D) x 17.4″ (H) 515 mm (W) x 380 mm (D) x 441 mm (H)	
Weight	90 lbs (41 kg)	
Power supply input	100-240VAC, 50-60Hz, 200W	

CELLINK, A BICO COMPANY

CELLINK is creating the future of health as part of BICO, the world's leading bioconvergence company. When CELLINK released the first universal bioink in 2016, it democratized the cost of entry for researchers around the world and played a major role in turning the then up-and-coming field of 3D bioprinting into a thriving $1 billion industry. Today, the company's best-in-class bioinks, bioprinters, software and services have been cited in over 700 publications and are trusted by more than 1,000 academic, pharmaceutical and industrial labs. At the forefront of the bioprinting industry, CELLINK aims to alleviate organ donor shortage with biofabricated transplantable organs and remains committed to reducing our dependence on animal testing and increasing efficiencies in drug development with more physiologically relevant bioprinted organ models. Visit cellink.com to learn more. BICO is listed on the Nasdaq Stockholm Main Market under BICO.

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