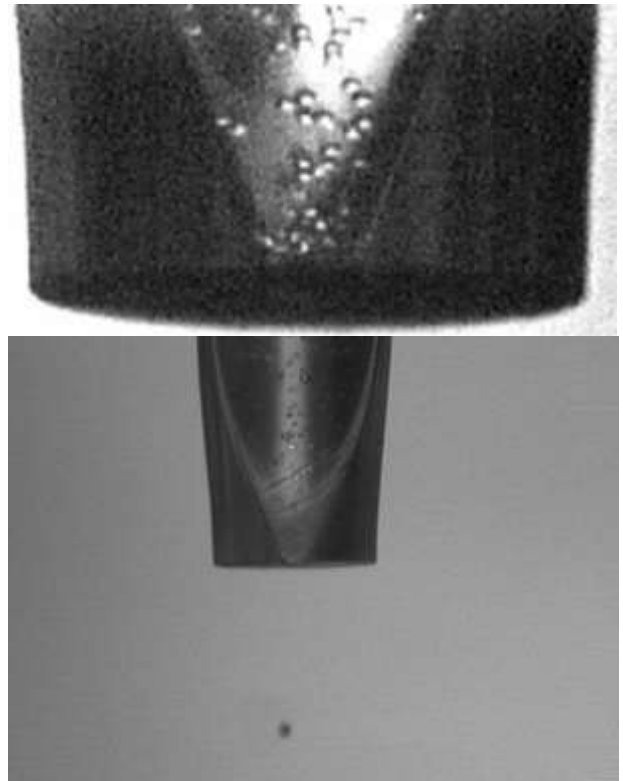


Tissue Engineering

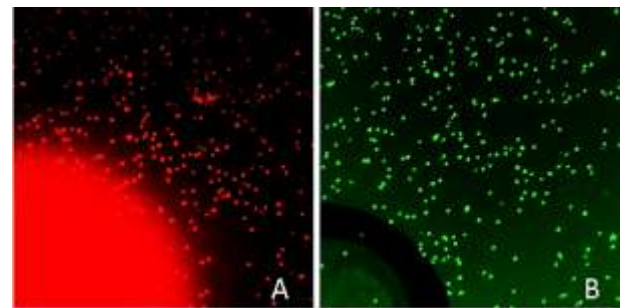
Product Description

MicroFab has focused its broad biomedical application technologies into a unique printing platform targeting Tissue Engineering. MicroFab's TissueJet™ printing platform incorporates multiple printheads to print living cells and 3D scaffolds to support tissue regeneration. This platform is capable of generating materials for tissue engineering research to pave the way for clinical therapies in the regenerative medicine field. The inherent dispensing flexibility of the TissueJet™ platform will allow researchers to pursue multiple protocols using a number of materials to create complex 3D tissue engineered structures.



Unique TissueJet™ Features

- Multiple printheads to dispense living cells, growth factors & other biological reagents
- Multiple printheads to dispense high viscosity hydrogels to support living cell cultures
- Optional heating and stirring capability for each printhead reservoir
- Designed to fit inside modern cell culture laminar flow hoods



- Integrated UV curing fiber for photocrosslinking of hydrogels
- Software for contour-following 3D printing

Applications

- 3D printing of tissue regeneration scaffolds
- Printing living cells for Tissue engineering, Drug screening & Titration studies
- Printing photocurable materials
- Printing chemically curable materials
- Printing bioreagents and biomolecules
- Co-printing scaffolds and cells for regenerative medicine applications

Design Specs

- Up to 4 inkjet dispensing devices
- Optional dispenser reservoir heating up to 50°C
- Up to 2 ValveJet dispensing units
- Integrated vertical inspection camera
- UV liquid filled optic fiber bundle
- Nebulizer with condensation catcher
- Vertical area camera
- Laser micrometer for contour printing
- Beta machine to ship in Q4 2012

