

FX-6000™ Tissue Train® System (FX-6000TT)

3D cell culture in a gel matrix with or without cyclic uniaxial tension.

- Stand-alone culture system to create 3D geometries for cell culture in a matrix gel or allows the cells to build a self-assembled matrix that connects to the anchors in a **Tissue Train® culture plate**.
- Utilizes regulated vacuum to deform cells cultured on flexible-bottomed culture plates.
- Simulate *in vivo* tissue strains and frequencies in various cells.
- Contains state-of-the-art digital valve to automatically regulate and maintain vacuum to provide the specified strain regimen.
- Multiple frequency, amplitude and waveform changes can be programmed in one regimen.
- Waveforms available: static, sinusoidal, heart stimulation, triangular, square, custom.
- Supplied with Arcangle® Loading Posts to provide uniaxial strain - using 6-well **Tissue Train® culture plates** and 6-well **UniFlex™ culture plates** - and with linear molds (Trough Loaders™) to create bioartificial tissue strips up to 35 mm length using Tissue Train® culture plates (Fig. 5). Further molds and plates for trapezoidal shaped hydrogel optionally available.
- Optional cylindrical Loading Posts to provide equibiaxial strain in 6-well **BioFlex® culture plates** for 2D cell constructs or in 6-well **Tissue Train® Circular Foam** culture plates for 3D cell constructs.
- Optional Baseplate Kits to use the FX-5000TT with more than one baseplate, for Tension applications, or high throughput tests.
- Drives up to four independent FlexLink® remote compression and/or tension controllers.
- Works with microscopy devices **StageFlexer®**, **StageFlexer® Jr.**, **FlexFlow™**, and image collection system **ScanFlex™**.
- FX-6000™ Tissue Train® System includes:
 - Host computer with flat panel monitor
 - FlexSoft FX-6000™ software
 - FX5K™ Tension FlexLink®
 - BioFlex® Baseplate and four gaskets
 - Tissue Train® Trough Loaders™
 - Arcangle® Loading Stations™
 - Four Tissue Train® culture plates
 - Drying filter, water trap, vacuum tubing, and grease/lubricant



Figure 4. FX-6000™ Tissue Train® System.

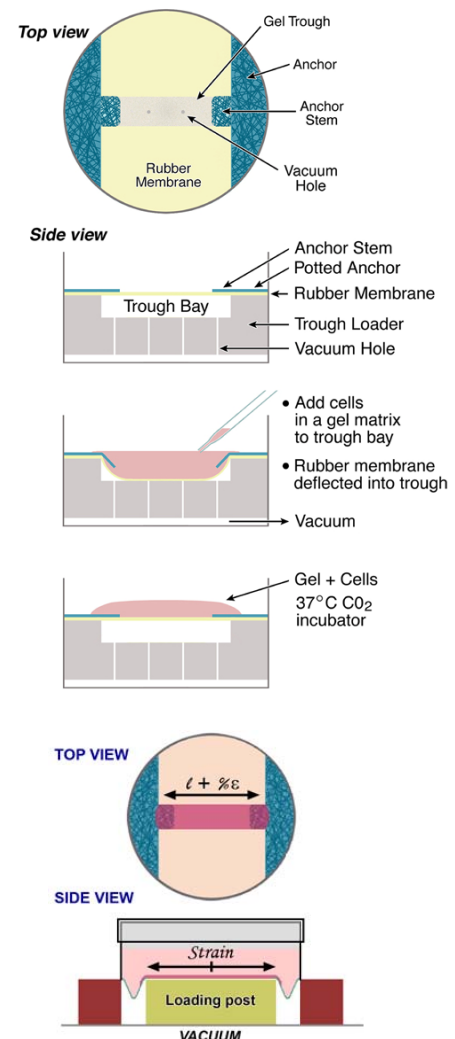


Figure 5. Bioartificial tissue development and uniaxial strain application with the Tissue Train® system.

Please note: For operation, the FX-6000TT System requires a vacuum pump.