

Rapid Fluidics

Shaping the Future of Microfluidics

**Introduction to Design, Prototyping, and Manufacturing Services
Anatomical Modeling Fall 2024**



What we do

- Microfluidic prototyping & production, utilising novel 3D printing and other specialised fabrication techniques
- 24-hour turnaround of bespoke prototype designs with minimal overhead costs.
- Design consulting services for microfluidic design & development
- Mid scale manufacturing with support to large scale manufacturing



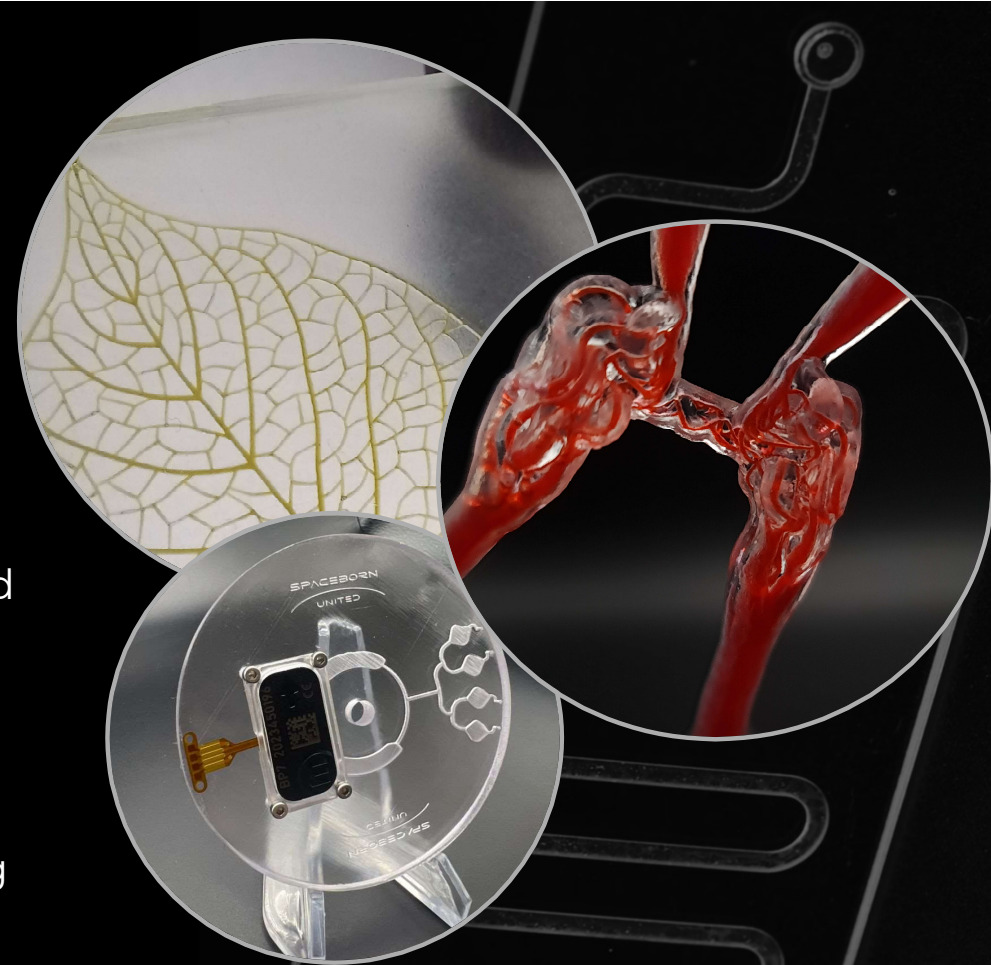
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Capabilities - at a glance

Our core capabilities include rapid prototyping of enclosed microfluidic devices, including experience with **vascular and renal models (any others?)**

Using scans or drawings we can create very detailed models **with channels down to X.**

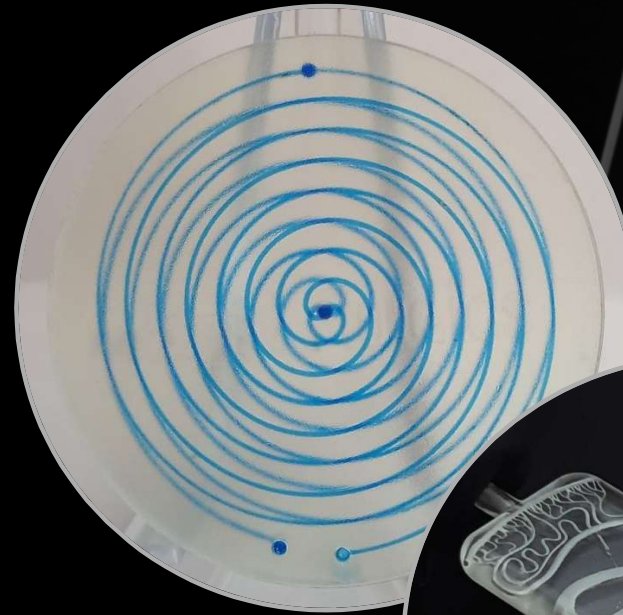
We have developed a process for embedding electronics and other components within enclosed microfluidic devices, providing a simple prototyping solution.



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Our Customers

- Bio-Defense
- Medical Devices
- POC Diagnostics
- Automation
- Basic Research
- Drug and Therapeutic Development
- Aerospace Research
- Lab on a Chip/Organ on a Chip
- Environmental Testing
- Cosmetics Industry
- Contract Manufacturers and Design Consultancies



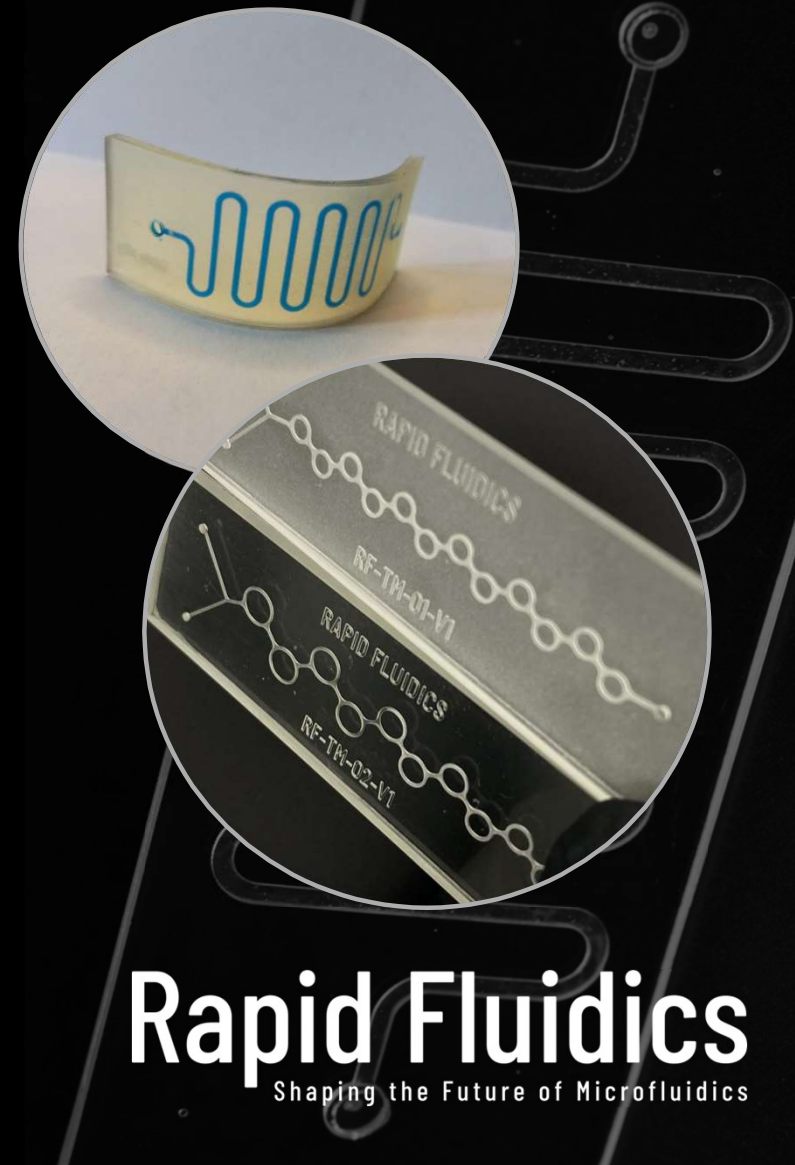
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Materials

We can manufacture 2D and 3D printed geometries in a range of high quality methacrylate based resins. Materials are selected to suit the geometry and application of a part, which can meet the following requirements:

- Optically clear or opaque
- High temperature resistant
- Flexible
- Multiple layers
- Biocompatible
- Integrate electrodes, glass, membrane materials, and flow control as well

We can also pressure form some geometries in a range of thermoplastic materials.



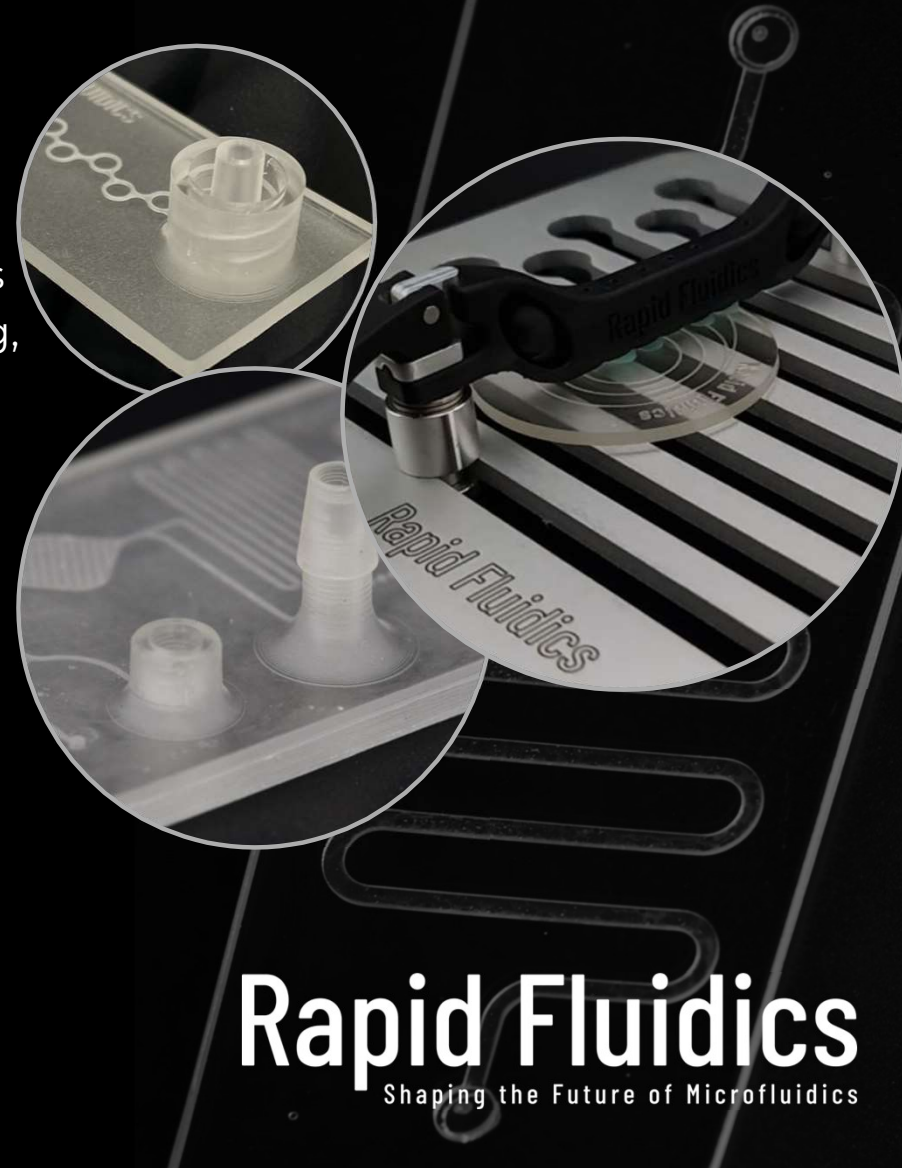
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Microfluidic Connections

We can integrate a number of standard connections into microfluidic components to simplify part testing, these include:

- Standard threaded luer lock
- Mini luer
- Integrated tubing
- Barbs
- Standard threaded connections down to M2.5

We also offer a Modular Microfluidic System (MMS) with accessories to provide a simple method to create fluid connections to flat microfluidic chips – visit our webshop for all the details !

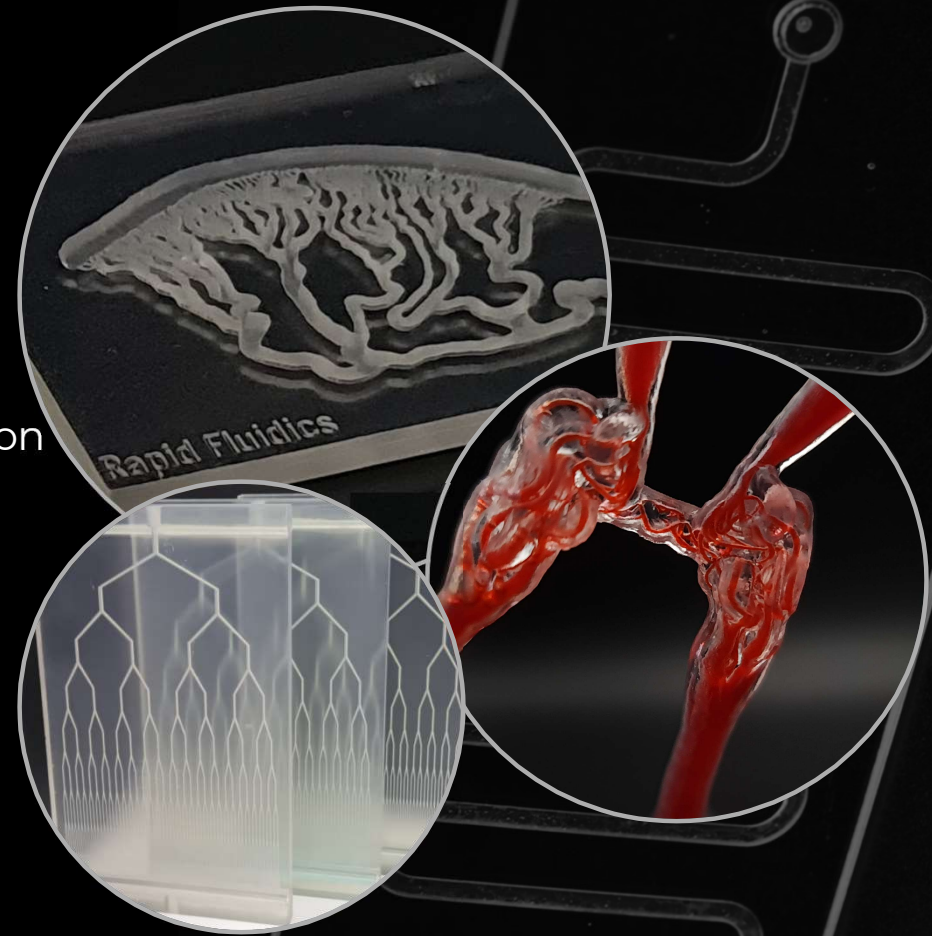


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Anatomical Models

Microfluidic models of vasculature systems can be used for research and training, reducing demand on lab-animal testing.

3D-printing enables production of more complex geometry than traditional manufacturing technologies allow. Combined with Rapid Fluidics' capabilities with manipulating CAD Data, organic features can be created from 3D and 2D scans.



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