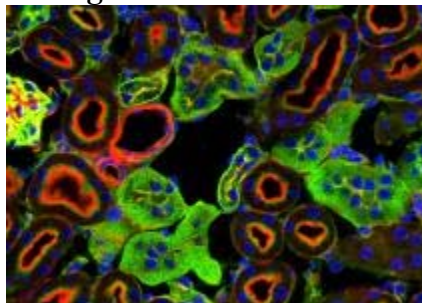


Microfabrication Centre (Microfab)

The UHN Microfabrication Centre offers unique capabilities for prototyping and microfabrication of polymer-based lab-on-a-chip devices. The facility is led by Academic Advisor [Dr. Lothar Lilge](#) and Manager Duoaud Shah.



Service Department(s): Research Communications

Overview

The UHN Microfabrication Centre, located in room 9-401 of the Toronto Medical Discovery Tower ([TMDT](#)), has capabilities that include photolithography, wet chemistry, hot embossing, electroplating and substrate bonding. The facility is housed within two cleanrooms, certified to ISO 6 and ISO 7 standards. The available equipment and tools complement those available in the cleanroom network at the University of Toronto.

The centre works closely with academics from UHN, other research institutes and universities, as well as with industry partners.

Services

Microfluidic device design and construction on a fee-for-service basis.

Unique Capacities

The Microfabrication Centre's equipment and cleanroom environment (certified to ISO 6 and ISO 7 standards) provide:

- Prototyping of microfluidic devices for research
- Hot embossing to produce high-precision moulding of polymer parts with micrometer and nanometer dimensions and high aspect ratios
- High throughput creation of optical gratings and microfluidic chips for biomedical applications
- Maskless photolithography system to deliver precise UV exposure down to 1 μm resolution; this system is not limited to the standard two wavelengths for photolithography, offering up to five different wavelengths for exposure

Available Equipment

- Hot embosser

- Maskless UV system
 - Mask aligner
 - Electroplater
 - Microscopes
 - Plasma bonder
 - PMMA/PC – large and small
 - UVO cleaner
 - Laminar flow hood
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Using the Facility

The facility is available to all users, UHN or external, on a fee-for-use basis. Many instruments can be booked in 15-minute increments with a minimum 30-minute commitment. For details please contact [Duoaud Shah](#) or visit the [Microfabrication Centre website](#) for price lists, equipment details and a web calendar with facility availability.

Quick Links

- [Webpage](#)
 - [Instrument Booking Request Form](#)
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Contacts

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UHN Microfabrication Centre

Toronto Medical Discovery Tower 9-401

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