

Title: Biomicrofabrication services provided by a staff scientist**Authors:**

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Keywords:

Microfabrication, cleanroom, thin films, biomedical engineering, cell and tissue models

Abstract

Since the beginning of 2025, the faculty has had a staff scientist specialized in biomicrofabrication. He offers training for users of microfabrication equipment located especially in SI-cleanroom in Hervanta Campus and for less frequent needs, processing services and process development and design consultation. The offered processes include physical and chemical vapor deposition of thin films (e.g., Au, Pt, Al, Cu, Ti, TiN, SiN, SiO₂, Parylene-C), wet and dry etching, photolithography, lithography mask fabrication, atomic layer deposition, inkjet printing and 2-photon polymerization lithography. Also, characterization by profilometers, optical and laser scanning microscopes, and optical thin film characterization tools are available.

Previously, these equipment and processes have been used in our faculty especially for fabricating PDMS-casting molds for custom-designed microfluidic chips, microelectrode arrays (MEAs) and other sensors for organ-on-chips and other cellular models. However, the researchers are encouraged to think also other applications where thin film coatings and micro- and nanostructures are needed.