

Lab-on-a-Chip Foundry

Microfluidic Integration of Assays

Reduce your time to market: We offer broad technological support in developing your innovative Lab-on-a-Chip system faster and more cost efficiently.

Cutting down development costs and minimizing your development risks, the Lab-on-a-Chip Foundry enables you to evolve, integrate and realise your (bio-)chemical assay from concept over prototype to product level.

After translating your assay into a sequence of microfluidic unit operations (fluidic transport, mixing, incubation, aliquoting, etc.), we generate a unique fluidic design that is customized for your assay. This integration process is based on our Design Handbook, a comprehensive library of fluidic unit operations which can be easily combined.

Having access to a number of standardized production processes, we construct your functional sample in our Lab-on-a-Chip prototyping laboratory. We ensure the compatibility to up-scalable production processes and offer small- to medium scale production in the range of tens of thousands of disposables ourselves.

Finally, we test and characterize your Lab-on-a-Chip prototype in terms of its physical, fluidic and biochemical properties.

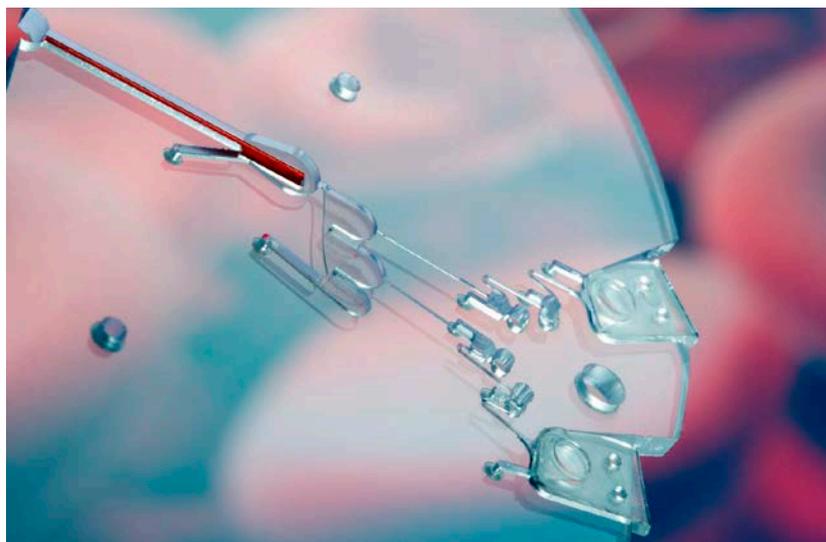


Fig. 1: Example of a lab-on-a-chip disposable test carrier with integrated capillary for the uptake of a blood sample.

Technologies

- Centrifugal microfluidics
- Layout & Simulation
- Prototyping + production (in class 10.000 clean room)
- Pathogen & cell culture laboratory
- Immunoassays, DNA/RNA assay, enzymatic assays and others



Fig. 2: Example of a portable, integrated system for point-of-care diagnostics

Would you like to apply one of your biochemical assays to a microfluidic Lab-on-a-Chip system?

Or are you looking for an expert with whom you can develop a new assay on a microfluidic platform?

If yes, we are your partner!

For further questions don't hesitate to contact us – we are looking forward to your phone call!