

Microfluidic instruments & fluidic setups

Lisa Muiznieks, PhD
Paris, France



Who we are & core expertise

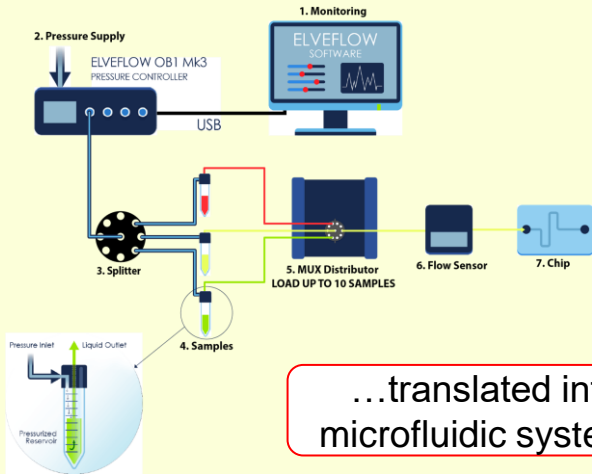
France SME



- Born as 'Innovation Unit' of Elvesys
- Microfluidic instruments, flow control setups, user-friendly platforms

MICROFLUIDIC SYSTEM DESIGN EXPERTS

User needs...



...translated into
microfluidic systems

Hardware/ software



Microfabrication



Cell biology lab



Tech skillset

- Electronics
- Mechanics
- Pneumatics
- Software & Firmware
- Simulations
- Fluidics



Call areas of interest for us

Health cluster

- **EIC Pathfinder Open [March 7th 2024; 2025]**
- **Bioprinting of living cells for regenerative medicine [Horizon-HLTH-2024-TOOL-11-02]**
[11 April]
 - Cells + bioink – mixing units, shear stress, clogging, injection module
 - Microfluidic flow path for use-case testing, e.g. organ-on-chip, long-term perfusion..
- Any projects where you need microfluidic expertise (flow control solutions)

We are looking for:

- **Consortia** to join as a partner (any stage)
 - Where fluid control instruments, modules and platforms are of value
- **Partners** to join our consortia (MIC coordinates tech-based proposals; EIC, RI)
 - Biology (e.g. 2D, 3D cell models for use-case and validation; neurobiology, aging, ..)
 - Droplets (e.g. encapsulation, -omics, emulsions, ..)
 - Biomaterials & fabrication (3D bioprinting, membranes, perfusion scaffolds, ..)
 - Clinical (e.g. pre-clinical trial workflows, use-case demos, input on clinical needs, ..)
 - Digital, simulation, ML
 - Social sciences, DICO, impact (legal, ethical, regulatory aspects of non-animal models, ..)
- **Impact!**

Previous scientific and technology expertise

- >35 EU projects since 2018, 9 ongoing (coordinating 2)
- H2020, Horizon Europe, EIC, ITN doctoral networks, RISE staff exchange, bilateral calls..



Placenta-on-chip



Tumor-Lymph Node



Virus sensor



Novel flow sensor



Soil remediation



Heart-on-chip



Peptide synthesis



AI & cell culture



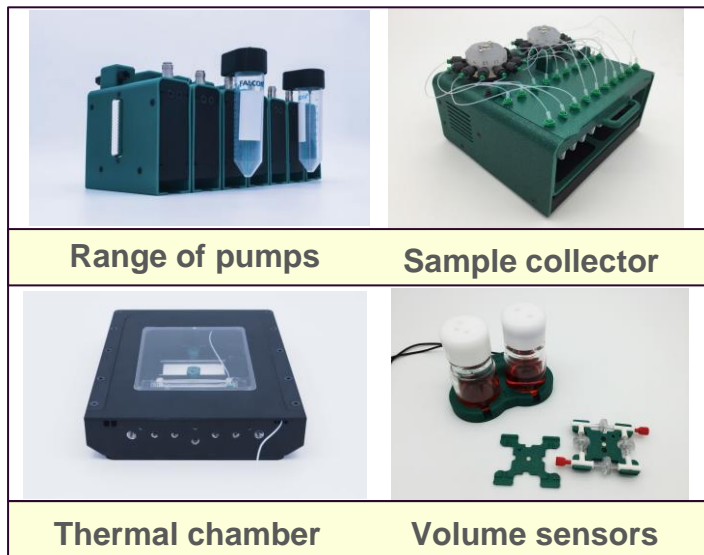
Tissue engineering



Biomaterial risk assess.

Our added value:

- A focus on real needs: Tech solutions, guides, applications notes, webinars
- Our stakeholder network: project partners, Microfluidics Association, CEN/CENELEC standards WGs, metrology institutes, ..



partnership@microfluidic.fr

