

## THE INTEGRATION OF SU, AUTOMATION & ROBOTICS TO ENABLE NEW THERAPY MODALITIES

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New therapies are constantly changing & evolving that require flexible technology solutions to enable rapid evaluations to proof of concept (POC). This flexibility can be achieved by finding novel ways to integrate new SU approaches, with automation and robotics, using line of sight sustainability from lab to manufacturing. Case studies will be presented for a set of novel therapies that incorporate rapid POC concepts for production.

- 1) the microfluidic workflow for RNA / LNP screening that incorporates 3D printing tools applicable for manufacturing
- 2) stem cell process development including differentiation machine vision control & novel harvest device implementation
- 3) organoid workflows integrated with bioprinting

The integration of analytics to speed the POC's will be discussed. In addition early POC evaluations are assisted with the use of algorithm assisted, guided workflows.