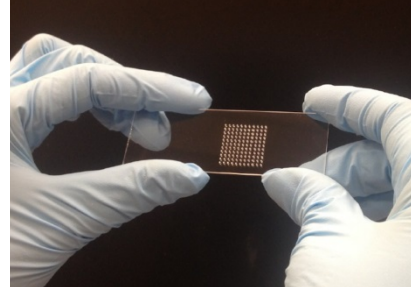


ARL Designs LLC
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New Providence, NJ 07974

Alan Lyons, CTO
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Industry:

- Pharma
- Biotech
- Medical Device
- Diagnostic
- Other: Tools

Management:

- Executive Leadership
Amy Lyons, President

- Board
TBD

- Scientific Advisory Board
TBD

Number of Employees: 5

Finance:

- Auditor - TBD
- Current Investors / Financing to Date: \$1M in SBIR and state grant funding
- Amount of Financing Sought TBD

Legal:

- Corporate – Moses & Singer
- IP - TBD

Executive Summary:

ARL Designs LLC has developed a Nano-Droplet Array Plate (nDAP) that enables the analysis of high-density arrays of individual cells in a 3D environment as a function of time; cells can be retrieved at any time for additional analysis.

Company History:

ARL Designs LLC (ARLD) was founded in 2010 by Professor Alan Lyons to commercialize durable polymer nanocomposites. The company is supported by development contracts from industry and by federal and state grants.

Market Opportunity / Unmet Need:

The ARLD Nano-Droplet Array Plate (nDAP) satisfies an unmet need for an inexpensive and commercially available platform for the isolation and study of individual cells over time. Our platform combines the best qualities of conventional well-plates (a \$500M market in 2009) and the capabilities of micro-arrays (global market estimated at \$8B in 2018.) Compound annual growth rate for micro-arrays is 20 – 30%.

Products/Services – Launched & Pipeline:

Single Cell nDAP: A single cell (or small groups of cells depending upon user preferences) can be dispensed on each site of a 96 or 384 nDAP plate.

Precision Dispensing: A low cost (<\$2,000) robotic dispensing system for depositing nanoliter droplets containing live cells or rare natural products onto the nDAP consumable plate.

Maldi-TOF nDAP: Our plate is compatible with conventional MALDI-TOF systems.

Diagnostic nDAP: The nDAP surface can be modified using any available surface chemistry to bind sensor molecules to array sites and detected by fluorescence for ELISA type tests.

Commercial / Technical Milestones:

Precision dispensing: Droplet volumes of 28 nL ±2%

Mixing: Controlled evaporation induces convection, doubling reaction rates.

Maldi-TOF sensitivity: 4 attomoles of NeutrAvidin with a Bruker Microflex

Fluorescence Sensitivity: NeutrAvidin was detected at a concentration of 1.0 µg/ml (450 attomoles of protein).

Intellectual Property:

ARLD has exclusive rights to license all related superhydrophobic technology from City University of New York; 4 patents have been filed and are pending.

Competition:

Enumeral – though perceived as a competitor, they are not selling their platform; instead they are using it to develop new drugs.

IsoPlexis – early stage company providing a "biochip" technology utilizing robotics 10x the cost of ARL Designs

Eureka Therapeutics - Services are provided on a fee-for-service basis.

Sphere Fluidics - Picodroplet formation biochips require specialized reagents and equipment

Financial Projections (Unaudited)

With our NDAP capabilities, we expect to capture a significant share of an estimated \$800M market.

Please indicate primary purpose of Presentation: Investment