



BIOSENSORS, MULTIPLEX ELISAS AND LATERAL FLOW ASSAYS, MICROFLUIDIC DEVICES, DNA BIOCHIPS, GLYCAN ARRAYS, MICRONEEDLES, PROTEIN BIOCHIPS, DOT-BLOT ASSAYS, AND MANY MORE...

IN BASIC RESEARCH

**IN DIAGNOSTICS** 

**IN YOUR INDUSTRY** 

## **OUR VALUES**

**SCIENION** IS A WORLD LEADER IN LOW VOLUME PRECISION DISPENSING AND MICROARRAY TECHNOLOGIES.

WE PROVIDE AN INTEGRATED PRODUCT PORTFOLIO FOR DEVELOPMENT AND **OPTIMIZATION OF MULTIPARALLEL BIOANALYTICS, HIGH-THROUGHPUT SCREENING** AND PRODUCTION OF MICROARRAYS.

> **C**ustomer First Error Free On Time Dedication Excellence Credibility Honesty

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# Innovation Integrity

Value Creativity Courage Persistence Persistence Knowledge Understanding Performance Improvement Competence Reliability Discipline Responsibility Community **Collaboration** 

Leadership Teamwork Energy Goals Cooperation Diversity Growth

## **TECHNOLOGY**

Unsurpassed Precision and Accuracy Volume on Demand Technologies Printing of Arrays and Arbitrary Patterns Into a Wide Variety of Substrates including Cavities Highly Reproducible Drop Volumes



## HIGH PRECISION DISPENSING



### OPEN PLATFORM ALL SUBSTRATES ANY CONTENT ANY CONFIGURATION





BROAD DISPENSE RANGE IN ONE SYSTEM DROP ON DEMAND







## sciDROP PICO

Gentle Acoustic Piezo Dispensing Volume Control with Unique Visual Detection Non Contact Drop-on-Demand Dispensing and Isolating Living Cells

Typical Spot Size	80 to 250 µm
Drop Volume Range	30 to 800 pL
Viscosity Range	Up to 8 mPa s

Low Dead Volume - Minimum Sample Waste No Need for Printing Additives No Satellite Drops No Cross Contamination



Stroboscopic imaging of drop ejection from 0 to 200 ms

## **PICO DISPENSE CAPILLARIES - PDC**

sciDROP PICO dispensing technology is based on a ceramic piezo element that is fitted around a glass capillary. The piezo element is triggered by an electrical pulse which, in turn, leads to contraction of the ceramic material. This creates a gentle wave inside the capillary that forces out a small drop of sample from the orifice of the PDC (piezo dispense capillary).

Printing quality depends on numerous parameters. Therefore, SCIENION offers a broad portfolio of different PDC sizes and surface coatings. The dispense process is fully controlled by pulse parameters settings as voltage, frequency, pulse width. This enables high accuracy and precision dispensing of a wide range of liquids, opening the door to many Life Science applications.



Custom coatings are also avaialble

#### Contact us for advice on the ideal PDC for your application

#### **Dispensable Media / Samples**

We have dispensed very successfully the following samples:

- Allergens, Antibodies, Antigens, Carbohydrates, Cells, Enzymes, Glycans, Glycoproteins, Lipids, Oligonucleotides / DNA / RNA, PNA, Proteins in Aqueous Buffers
- Organic Solvents as Acetone, BSA, Butylacetate, Ethanol, Glycerol, Isopropanol
- Gelatin, Hepes, Sol-Gel, Sucrose, Tween, Urea
- Magnetic Beads, Nanoparticles, Polymers





## sciDROP NANO

Electromagnetic Solenoid Microvalve Bulk Dispensing or Aspirate and Dispense Prints Dots, Lines, Bars and Coatings Volume Control via Flow Sensor

Flow Rate	Up to 8 mL/min	
Drop Volume Range	25 to 600 nL	
Viscosity Range	Up to 22 mPa s	

sciDROP NANO option combined with SCIENION's highest precision and accuracy is a perfect choice for dispensing into cavities of microfluidic devices, printing of bigger spots and thin or thick lines.

The technology is based on an electromagnetic micro-valve with an extremly fast response time. Moreover, since the current is kept low, samples are retained at a safe temperature.



Blocking solution spotted on a slide. 70 nL per spot. CV=4.3%. Array 11 x 43 = 473 spots.



Antibody solution spotted on a slide. 86 nL per spot. CV=2.1%. Array 13 x 45 = 585 spots.

### **DISPENSING TECHNOLOGIES**

## sciDROP CUSTOM

Our engineers can build a complete solution for your application



Custom Dispense Heads

with Custom Distance Between PDCs

**Disposable Tips** 

for Single Use

#### sciDROP PICO & NANO in One Device

#### Pulse Shaper for Volumes under 50 pL with our sciPU VARIO & High Viscosities (Gelatin, Oil, Wax)



Reducing stable drop volume from 250 pL (left) to 35 pL with sciPU VARIO modified pulse shape (right)



Printing arrays (15x15) of Glycerol in a range of 50, 60, 65 and 70 % at 25 °C.

## SOFTWARE



### SMART TARGET ALIGNMENT

- Advanced Software Modules for Detection & Analysis
- Fiducial Marks for Highly Accurate Positioning and for Individual Biosensor Alignment
- Find Target Array: Matrix of Equal Structures Detection and Spotting on Them
- Find Target Reference Points: Detection of Fiducial Marks on the Target to Define a Reference Point and Orientation of The Target

#### Image analysis, pattern recognition and angle correction to identify deposition targets

### **DROP CONTROL: FULL TUNING OF DROPLET**

- Speed, Size and Volume of Droplet Electronically Modified
- Adjustments in Voltage (Speed) and Pulse Width (Volume) for Optimal Shooting and Reliable Printing
- In-Line QC of Dispensed Drops: Volume, Deviation and Speed
- Library of Validated Programs/Tasks based on Applications
- Validated Technology for Many Diagnostic Applications





## POWERFUL QUALITY CONTROL

- Online QC Analysis
- Spot Analysis: Positional Accuracy, Area & Roundness
- Re-spotting of Missing Spots
- Scan 100% of Spots
- Results showed Live
- sciREPORT Software to Import/Export Run Parameters into your Labfolder or LIMS Systems

#### Many more options according to your needs

## HARDWARE: FROM R&D TO MANUFACTURING



#### **COMPONENTS of SUPERIOR QUALITY**

- High Precision Motion System
- Environmental Control -
  - Temperature , Humidity & Dew Point
- Ceramic Vacuum Holder for all Substrates -Coolable and Heatable, Customized
- 3D Drop Camera and Live Stream Camera
- UV Crosslinking Package
- Inline Degassing System
- Anti-Static Bar
- Illumination Ring for Low-Contrast Surfaces
- Efficient Ultrasonic Washing
- Compatibility with Organic Solvents

#### **EASY SCALABILITY**

#### Same printing technology used from development to large scale production runs



### **TESTIMONIALS**

"sciFLEXARRAYER is a key tool in all of our projects, for depositing an enzyme onto the surface of an electrode, or most challenging we use it to deposit onto the surface of a microneedle array.

Exactly the right volume, in exactly the right place."

Prof. Tony Cass,

Imperial College, London



"We print from 200 to 500 different antigens on the chip, depending on the disease that we are monitoring.

We have been working together with SCIENION for several years, we started with one of their smaller instruments and now we are happy to own two of their largest instruments."

#### Donna Edmonds,

Chairman & CEO of ImmunArray Diagnostics, USA

#### Streamlining process validation

The sciFLEXARRAYER product line represents the perfect tool for automated **low volume precise dispensing** of various types of samples (i.e. biological, organic, nanoparticle and dyes) in diagnostics, genomics, proteomics and technical applications.

sciFLEXARRAYER comes in four well-established versions, addressing the needs of our customers from early research to high throughput manufacturing:

• sciFLEXARRAYER S3 for R&D

sciflexarrayer S3

- sciFLEXARRAYER \$12 for Medium Scale Batch
- sciFLEXARRAYER SX for High Scale Batch
- sciFLEXARRAYER \$100 for In-Line Production



Bench-Top Size

Economic Unit

For Academic and Research Labs

Flexible Printing Capacity in Microplates, Glass Slides, Microfluidics, etc

Arraying of DNA and Proteins, Cell Transfection Arrays, Loading of Biosensors and Preparation of MALDI Targets

#### **Reference** Centers

#### Available Options for the S3



"We have worked in partnership with the team at SCIENION who have supported our development of customized arrays – enabling us to print DNA to a range of substrates, such as plastic, glass or silicon, depending on the application. The tool offers accurate, precision printing, at speed. As the printer is scalable we'll eventually be able to produce high volumes of microarrays."

Dr Jennifer Hannant, Head of Chemistry at QuantuMDx

Compact All-in-One Design For Medium Manufacturing Needs High Precision Magnetic and Spindle Drives Outstanding Batch-to-Batch Reproducibility Ideal for Biosensors, Wafers (up to 12" or 300 mm), Slides

### sciFLEXARRAYER S12 for MEDIUM SCALE BATCH



Reference Clients



Available Options for the \$12 and \$X Humidity and Dew Point Control Cooling Unit for both Source Plate and Targets Anti-Static Bar 3D Drop Camera Spot-on-the-Fly to Speed up Array Printing Clean Room Compatible Fiducial Recognition and Target Alignment Online Array Quality Control







Reel-to-Reel Operation Heatable Target Carriers





**Robotic Handling** 



**RFID Station and Target** Barcoding for Tracking



Stacking System with Environmental Control



Drying Tunnel



UV Crosslinking Box



Online Array QC

#### Manufactured by SCIENION

- Infectious Diseases Multiplex Diagnostic Tests •
- Multiplex Food Diagnostics Biochips .
- High-Speed Optical Laser Detectors •
- Biosensors Based on qPCR .
- Gas and Odor Sensors .





#### We optimize your production process to

#### **Reduce Scrap Rate**

#### **Increase Efficiency**

#### **Maximize Return on Investment**

Possibilities are unlimited: starting from application support, including customized hardware and software solutions and process engineering adapted to meet your specific needs.



Up to 12 dispensing channels to maximize production throughput



Custom target holder to host nitrocellulose round membranes



UV-LED light source mounted next to the dispense head to crosslink probes right after printing

### **GLOBAL SERVICE & SUPPORT**

- Highly Qualified Personnel for On-site Service & Support
- Quick Response Worldwide
- Service & Maintenance Contracts Tailored to Your Needs
- Preventive Maintenance
- Basic & Advanced User Training
- Wear & Tear Parts Stock Guaranteed



For Europe & Asia For Australia, Canada & USA +49 (0)30 6392 1700 +1 888 988 3842

Features/Options	S3 📻 S12 🚎		
Field of Use	R&D	Medium Scale	
sciDROP PICO	Yes	Yes	
sciDROP NANO	Yes	Yes	
Number of Dispensing Channels	Up to 8	Up to 8	
Spottable Area (X x Y)	227 x 276 mm	380 x 370 mm	
Target Capacity	Up to 36 Slides 4 MTPs	70 Slides 12 MTPs	
Axis System	X-Y-Z Spindles	X-Y Magnetic, Z Spindle	
Axis Resolution (Step Size)	5 µm	l μm	
Axis Precision	< 5 µm	< 3 µm	
Absolute Accuracy	< 15 µm	< 5 µm	
Dispense Control Station (CCD Camera)	Yes	Yes	
Head Camera	Optional	Optional	
3D Drop Camera	No	Optional	
Live Stream Camera	No	No	
Cooling / Heating Unit	Optional	Optional	
Humidity Control	Optional	Optional	
UV Light (Crosslinking)	Optional	Optional	
In-Line Degassing	Optional	Optional	
Anti-Static Bar	Optional	Optional	
Spot-on-the-Fly	No	Optional	
Fiducial Recognition & Target Alignment	Optional	Optional	
Scan Spot Area	Optional	Optional	
Online Array QC	Optional	Optional	
sciPU VARIO	Optional	Optional	
Dimensions with Enclosure (L x W x H)	760 x 850 x 650 mm	1300 x 800 x 1200 mm	
Weight	130 kg	420 kg	
Service and Maintenance Contract	Basic or Standard	or All-Inclusive Possible	

sx 🚍	S100	Features/Options	
High-Throughput	High-Throughput In-Line	Field of Use	
Yes	Yes	sciDROP PICO	
Yes	Yes	sciDROP NANO	
Up to 8	Up to 12 / Custom	Number of Dispensing Channels	
803 x 370 mm	Custom	Spottable Area	
140 Slides 27 MTPs	Continuous production	Target Capacity	
X-Y Magnetic Z Spindle	X-Y Magnetic Z Spindle, Conveyor Belt	Axis System	
1 µm	1 μm	Axis Resolution (Step Size)	
< 3 µm	< 3 µm	Axis Precision	
< 5 µm	< 5 µm	Absolute Accuracy	
Yes	Yes	Dispense Control Station (CCD Camera)	
Optional	Optional	Head Camera	
Optional	Yes	3D Drop Camera	
Optional	Optional	Live Stream Camera	
Optional	Optional	Cooling / Heating Unit	
Optional	Optional	Humidity Control	
Optional	Optional	UV Light (Crosslinking)	
Optional	Optional	In-Line Degassing	
Optional	Optional	Anti-Static Bar	
Optional	Optional	Spot-on-the-Fly	
Optional	Optional	Fiducial Recognition & Target Alignment	
Optional	Optional	Scan Spot Area	
Optional	Optional	Online Array QC	
Optional	Optional	sciPU VARIO	
1550 x 850 x 1750 mm	1300 x 800 x 1200 mm	Dimensions with Enclosure (L $\times$ W $\times$ H)	
410 kg	420 kg	Weight	
Basic or Standard	or All-Inclusive Possible	Service and Maintenance Contract	

## **ASSAY DEVELOPMENT**

**SCIENION** offers innovative, complete and flexible solutions for assay development and optimization for Diagnostics and Life Science research.

Our experts specialize in all aspects of successful assay development.



We work with **all typical supports** including microplates, biosensors, wafers, slides, nitrocellulose membranes, lateral flow membranes and microfluidic chips that are made of glass, silicon dioxide, polymers or gold.



### PRINTING ON NON ACTIVATED SURFACES - MICROFLUIDICS

Fast and Effective Surface Functionalization + Probe Immobilization
 Approach for Non Activated Surfaces

#### sciPOLY 3D

- Solution Containing a Soluble and Photoreactive Polymer
- Ideal for Polymer Surfaces as Microfluidcs, Cartridges and Microplates

### **APPLICATION SUPPORT**

• Array Specifications Array Layout - Spot Diameter - Dot Pitch

- Substrate Specifications
   Substrate Format Surface Functionalization of Custom Supports
- Printing Protocols

Buffers - Concentrations - PDC Surface Chemistry - Wash Procedures



## **ASSAY DEVELOPMENT**



### ASSAY TO ARRAY TRANSFER - MINIATURIZATION & MULTIPLEXING

The primary motivator for transferring traditional ELISA assays to a miniaturized multiplex ELISA format is the significant **saving of time, assay materials and patient samples**. The **use of capture probes** for example, can be **reduced by a factor of 10<sup>5</sup>-10<sup>6</sup>** yielding equivalent data at the same or even better sensitivity. With multiplex ELISA tests, multiple analytes can be detected in parallel with all controls included in the same well. With SCIENION sciMULTIPLEX BOX, miniaturization and multiplexing can be achieved.

High Quality Multiplex Immunoassays

#### No Non Specific Antigen/Antibody Binding

#### sciMULTIPLEX BOX

Reproducible Precision
Large Dynamic Range (4 logs) with pg/mL Sensitivity



#### Enables miniaturization and multiplexing of classic assay applications to planar array format!

#### **ASSAY OPTIMIZATION - CALIBRATION CURVES**

An example of assay optimization is the investigation of cardiovascular disease to diagnose it's presence and progression using a panel of protein biomarkers in microarray format with a sandwich immunoassay constructed for each of the capture antibodies. Calibration curves confirm that sensitivity and dynamic range are comparable to standard whole well ELISAs (30 – 2000 pg/ml or 100 – 2000 pg/ml, respectively).



Calibration curves of two protein biomarkers. One example microarray image is shown as an insert.

Two different detection formats were successfully tested with microarray ELISA.

The biotinylated detection antibodies were stained with streptavidin conjugated either with HRP for colorimetric readout (image left) or with Cy3 for fluorescent readout (image right).



## **ASSAY DEVELOPMENT**

### sciREADERs FAMILY: FL2, CL2 & Multiplex Lateral Flow



- High Resolution Digital Imaging for Colorimetric and Fluorescence Assays
- For Slides, Microtiter Plates, Lateral Flow Membranes and Custom Format

### **ANALYZING MULTIPLEX DATA of MULTIPLEX ARRAYS**



- Powerful Software
- Quantitative Detection
- Grouping of Spots and Definition of Custom Test Rules
- Fast Reading (2 min/plate)
- Automated Spot Finding, Image Analysis and Evaluation of Arrays
- Seamless Integration of GAL Files
- Fully Integrated Image Acquisition, Analysis and Reporting
- OEM Units with Software and Hardware Customization

#### sciCONSUMABLEs for HIGH QUALITY ARRAYS

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CROPLAT	res

GLASS SLIDES

#### sciPLEXPLATE 96

- High Immobilization Efficiencies Optimized Surfaces
- 12x8 Well Strips, 12x8 Single Breakable and 96 Well Solid Formats
- Functionalized Surface for DNA, Oligos and Protein Microarrays
- Compatible with Standard Lab Automation

#### sciCHIP

- High Density and Homogeneity of Coupling Groups
- **EPOXY** Coating for Oligos Immobilization
- AMINO Coating for Immobilization of PCR, RT-PCR Products
- ALDEHYDE Coating for Immobilization of Oligos, PCR Products, Peptides and Cells



#### sciBUFFER systems

- Optimized for DNA or Antibody Microarray Application
- Pre-Mixed and Sterile
- Compatible with All Major Microarray Spotters

## **CONTRACT MANUFACTURING**

Using State-of-the-Art sciFLEXARRAYER technology, SCIENION achieves the highest quality and consistency for array production. Quality control of 100% of the arrays is guaranteed.

Leveraging our Contract Manufacturing Services saves your time and money, and enables you to focus on your core business.

### FULL TEST DEVELOPMENT SERVICE: From Idea to Product



### **QUALITY CONTROL & ASSURANCE**

- ISO 9001:2008 Quality Management System Certified for Development, Manufacturing and Sales of Dispensing Systems and Microarrays
- Clean Room Facilities
- Advanced In-Process QC, 100% Automated Array Control
- Functional QC: Application Tests of Randomly Selected Arrays
- QC Certificate Provided alongside with Each Batch of Arrays





Guaranteed Results: Advanced QC of Each Printed Array Short Production Cycles from Purchase Order to Shipment High Reproducibility in Diagnostic Assay Performance Knowledge Transfer at Any Time

"We have been using SCIENION manufacturing printing services to produce our CLART<sup>®</sup> product line. CLART<sup>®</sup> is a low density well-based microarray platform for clinical use that allows the detection of multiple targets in a single test. This technology, jointly developed between SCIENION and GENOMICA, has enabled us to meet high quality standards and a flexible production schedule." Dr. María Luisa Villahermosa, R&D Director of GENÓMICA



## **APPLICATIONS**

SCIENION dispensing technology enables the deposition of small capture molecules on a wide range of surfaces for drug discovery and diagnostics. Below are several examples of applications of sciDROP PICO technology in different fields such as human, veterinary, food and environmental.

### **MULTIPLEX ELISA**

- High Quality Multiplex Immunoassays in 96 or 384 Well Plates
- Deposit a Matrix of Capture Antibodies in a Defined Array
- One Assay per Well
- Antigen and Antibody Binding Optimization
- Replicates for Robust Statistical Analyses
- Large Dynamic Range (4 logs) with pg/mL Sensitivity
- Reduced Sample and Reagent Use, Lower Assay Costs

### MULTIPLEXED LATERAL FLOW

- Multi-Analyte Lateral Flow Microarray as a Diagnostic Method to Detect:
  - Proteins (Biomarkers, Toxins, Food Allergens) Microorganisms
  - Specific RNA/DNA Sequences
  - Toxic Chemicals (Plasticizers)
  - Contaminants (Antibiotics/Pesticides)
- Save Time, Material, and Costs

### POINT OF CARE TESTING

- Rapid Tests in Microfluidic Chip including a
   Reaction Channel and Waste Reservoir
- Multi-Analyte in a Single Test Readout
- Transfer of Existing Test to POC

### **BIOSENSOR LOADING**

- Probe Deposition onto High Reflective or Particular Surfaces: Wafers, Chips, MEMs, CMOS, Optical Sensors, Cantilevers
- Software for Detection of Microstructures and Intricate Patterns on Biosensors
   Fiducial Recognition
   Target Alignment
   Unsurpassed Level of Accuracy
   High Reproducibility



Microarray-ELISA for the detection of specific amplicons from microorganisms that cause mastitis in cows.



Lateral flow microarray immunoassay to detect genes that code for virulence factors from Escherichia coli O157. Courtesy of Aart van Amerongen www.wageningenUR.nl/fbr/sensing-and-diagnostics



Courtesy of Joanneum Research Institute (Austria)



## **APPLICATIONS**

### **DNA BIOCHIPS**

- Single or Double Stranded Nucleic Acid Spotted on e.g. Glass Slides in Microarray Formats
- Nucleic Acid Nucleic Acid Interactions and
- Nucleic Acid Protein Interactions as Diagnostic Tools
- Nanoliter PCR : Real-Time Expression Profiling and SNP Genotyping
- Efficient Analysis Methods: Fast Results and Low Cost

### **BLOOD GENOTYPING**

- High-Throughput, Fast, Reliable and Cost-Efficient Blood Genotyping Solution
- High-Throughput and Multiplexed Assay based on a DNA Chip
- Spotted Oligos (Specific for the Targeted Alleles) into 96 Well Plate
- Dedicated to the Genetic Characterization of Selected Extended Blood Groups

### **PEPTIDE / PROTEIN BIOCHIPS**

- Antibodies as Diagnostic Markers
- Accurate Characterization of the Antibody/Antigen Binding Region
- Excellent Performance and High Specificity in Single and Multiplex Antibody Analyses
- Multideterminate In Vitro Diagnostic Assay for Analysis of Heterogenous Antibodies involved in the Pathogenesis of Autoimmune Diseases





Courtesy of AXO Science (France)



Courtesy of Heiko Andressen, Fraunhofer Institute for Biomedical Engineering Published in J. of Immunological Met. 315, 11-18 (2006)

### **GLYCAN ARRAYS**

- Glycan Microarrays for High/Throughput Approach to Determine the Specificity of Lectins, or Glycan-Binding Proteins (GBPs)
- Carbohydrate Studies as a Tool in Biological Research and Medical Applications
- Multiplex Glycan Microarray to detect Several Carbohydrate Specific Antibodies



Multiplexed Glycan Array 12 x 14 multiplex (green: coated glycans + serum1, red: coated glycans + serum2)

## **APPLICATIONS**

### **CELL ARRAYS**

- Immobilization of Vital Cells used in Cell Based Biosensors, Multiplexed Toxicity Assays, Drug Screening and Protein-Protein Interaction Studies
- Bacterial and Mammalian Cells Successfully Dispensed
- Cells Spotted into Microtiter Plates and onto Glass Slides
- Formation of 100 nL drops on 400-500 µm spots



Courtesy of Université Claude Bernard Lyon 1 (France)

#### MICRONEEDLES

- Microneedles to Deliver a Broad Range of Different Low Molecular Weight Drugs, Biotherapeutics and Vaccines, including Published In Vivo Studies with a Number of Small-Molecule and Protein Drugs and Vaccines.
- High Quality Loading of Different Kinds of Microneedles (Solid, Polymer Microneedles)
- Reduced Sample and Reagent Use, Lower
   Production Costs

### **ENCAPSULATION TECHNOLOGY**

PCL's SG Cap<sup>™</sup> technology is an innovative new way to study molecular interactions. The SolB<sup>™</sup> reagent captures large amounts of chemicals or macromolecules within a network of pores. Captured molecules remain in their natural conformation and in an active orientation, without the need for any affinitytag modifications.

- Drug Target Identification by Compound Target Protein Binding
- Multiple Disease Diagnostic Chip
- Detection of Protein Expression in Cell Lysates
- Reverse Phase Protein Microarray with High
   Dimensional Proteomic Data
- Study of Molecular Interactions, e.g. Chemical Protein, Protein – Protein, Aptamer – Protein, etc



www.PCLchip.com



Courtesy of Tyndall National Institute (Ireland)

### SINGLE CELL ISOLATION AND NANOLITER DISPENSING

cellenONE, an automated single cell dispensing system based on

SCIENION piezo-acoustic technology, allows precise cell deposition on a wide range of microplates (96, 384, 1536) and microwell substrates.





#### LOW VOLUME, HIGH VIABILITY & PRECISION SINGLE CELL ISOLATION

#### FOR SEQUENCING... FOR CELL LINE DEVELOPMENT... AND MUCH MORE





Single cells from dissociated lung cancer spheroids successfully isolated onto a microscope slide. Every position contains a single cell.





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## WHY SCIENION?

SCIENION strives to develop innovative, reliable and cost efficient diagnostic and bioanalysis test platforms for the benefit of patients, consumers, public health and environmental protection globally. We aspire to be the number one partner for all players who share these common goals and to provide a broad range of solutions and services for our customers.

#### Experience with a focus on the future

Our considerable heritage makes us a reliable and competent partner. We have a close eye on and involvement with emerging research and key new developments in the field. We believe that our cutting-edge technology and know-how will continue to contribute to exciting advances in many areas such as personalized medicine, companion diagnostics, point-of-care testing, and wearable medical devices.

#### Solutions tailored for your needs

We are much more than an automation company. We are a complete solution provider for the diagnostic market with expertise ranging from assay development and optimization, through regulatory affairs to high-throughput production systems, with design and configuration tailored to meet your specific product needs.

#### Scalability made simple

Start small and grow big with us. Thanks to our in-house R&D teams we can offer the full range of services on your way to the market. Technology transfer can happen at any point of your project. Our contract manufacturing facilities (cleanrooms) are fully available to you if you use that route.

#### Global service and support

A team of qualified engineers and technicians serve our multiple clients from academia to the manufacturing sector worldwide. We understand the importance of application support, production process optimization and swift technical service. We strive to provide our clients with the highest level of security and rapid response time.

#### Quality comes first

SCIENION is certified according to DIN EN ISO 9001:2015 for the development, manufacturing and sales of dispensing systems, diagnostic manufacturing devices and microarrays. We generate loyalty from our broad customer base by providing high quality products and services and superior technical know-how and support.



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Printed January 2020