

## INFO REQUEST CARD

Please send me the following info:

### Axon

- GenePix Microarray Scanner

### Molecular Devices

- FLIPR HTS systems
- CLIPR Luminescence HTS system
- FLEXstation "mini FLIPR"
- Criterion Multidetector systems
- Absorbance  $\mu$ Plate Readers
- Fluorescence  $\mu$ Plate Reader
- Luminescence  $\mu$ Plate Reader
- Microplate Washers 96/384/1536
- Microplate Dispenser 96/384/1536
- Reagent Kits

### BioDiscovery

- ImaGene 4.2
- GeneSight 2.2
- CloneTracker
- Array Pack

### My interest is:

- short term ( $\leq 3$  month)
- longer term
- medium term (6 to 12 months)
- for information only

- Workshop on Fluorescence Imaging**  
(in collaboration with Leica Microsystems AG)  
Geneva 20. Nov. / Basel 22. Nov. / Zürich 23. Nov. 2001

## INFO REQUEST CARD

Please send me the following info:

### Hamilton

- Microlab STAR
- Microlab SWAP
- Microlab 4000 Series
- Microlab AT plus 2
- Microlab Sampler Series

### Pyrosequencing

- SNP Analyzer
- Sequence Analyzer SQA

### GeneMachines

- OmniGrid™ Microarrayer
- OmniGrid™ Accent  $\mu$ Arrayer
- HydroShear™ for DNA fragments
- HiGro™ bacterial and phage growth system
- Mantis™ colony picker
- HybChamber™ for hybridization

### Improvision

- Openlab Cell Imaging System
- Volocity 4D System

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November 2001

Update  
Bucher Biotec

## Sequence Analysis "At The Speed Of Light" Pyrosequencing SQA

Analysis of specific DNA sequences is used increasingly for sample identification and characterization.

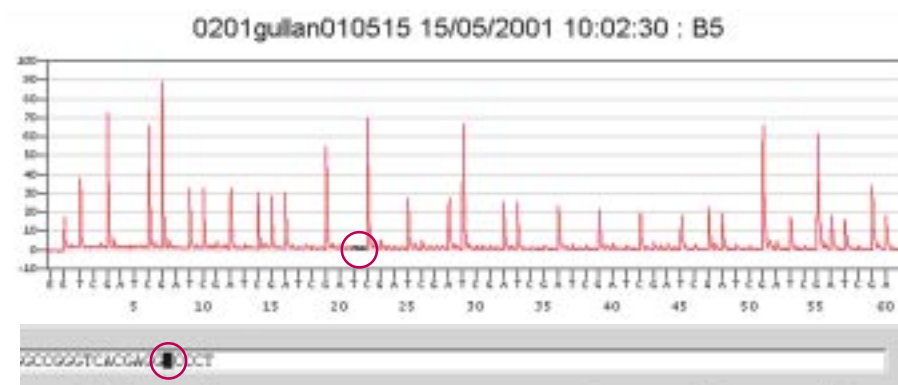
In clinical microbiology, sequence analysis can lead to improvements in the diagnosis and treatment of infectious diseases. In forensics, DNA samples have to be identified rapidly and with confidence. Fast results are often a critical factor. Using Pyrosequencing™ technology, samples are prepared and analyzed within hours.

DNA Sequences are obtained without the need of fluorescent dyes, labels or gel electrophoresis. The new SQA module from Pyrosequencing accurately analyses the

sequence and a base-calling algorithm annotates the most probable sequence and sets a quality measurement on the called sequence. A quality assessment for

each well is displayed as a color code. Any base, or stretch of bases, that does not match the master sequence are highlighted.

Please contact us for application notes demonstrating identification and typing of *Helicobacter pylori*, *Listeria monocytogenes*, *Bacillus anthracis* and determination of Apolipoprotein E alleles related to Alzheimer's disease.



## Pyrosequencing and University of Geneva to Collaborate on Diagnostic Test for Down Syndrome

Pyrosequencing AB's Molecular Diagnostics Business Unit and the University of Geneva today announced that they have initiated a sponsored research agreement to analyze genes and develop dia-

gnostic tests using Pyrosequencing™ Technology. The goal of the collaboration is to develop rapid genetic tests for the diagnosis of Down Syndrome, also known as trisomy 21. Professor Stylianos Antonorakis,

M.D., D.Sc., Director of the Division of Medical Genetics at the University of Geneva, will head the research program. Further details can be found at [www.pyrosequencing.com](http://www.pyrosequencing.com)

## Molecular Devices Announces the Acquisition of Cytion SA, a start-up company originating at the EPFL

Molecular Devices Corporation announced that it has signed a definitive agreement providing for the acquisition of Cytion SA, Lausanne. Cytion is developing systems designed to analyze ion channels through automated patch clamping, an area of significant interest to pharmaceutical companies and other life sciences researchers.

Ion channels are one of the most important classes of therapeutic targets. Currently, some of the most valuable information on ion channel activity can be obtained only through an electrophysiological technique known as patch clamping, a pain-

staking procedure using live cells that requires a highly skilled scientist and typically yields less than 10 successful experiments per day. Feedback from customers in pharmaceutical and other research settings indicates that a higher throughput approach to acquiring such data would be of significant value, an observation which led to Molecular Devices' investment last year in Essen Instruments, a developer of automated electrophysiology solutions. Continued confidence in the potential market for these products resulted in the agreement to acquire Cytion, a company whose products are highly complementary to Essen's. Next year, Molecular

Devices expects to launch automated patch clamping solutions covering a wide range of electrophysiological applications.

Cytion, founded in July 2000, focuses on developing automated electrophysiology solutions based on technology initially developed by Ecole Polytechnique Fédérale de Lausanne (Inst. of Physical Chemistry, Prof. Horst Vogel) and Dr. Christian Schmidt, a founder of Cytion.

Additional information is available via [www.moleculardevices.com](http://www.moleculardevices.com)

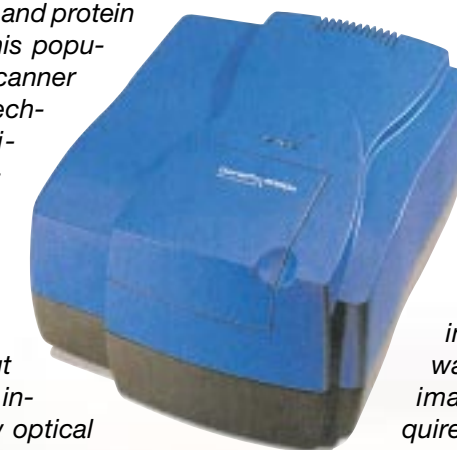
Update  
Bucher Biotec

Paul Bucher, Analytik und Biotechnologie, Basel Switzerland



We are proud to announce the appointment of Paul Bucher Company as the exclusive Swiss distributor for Axon's Functional Genomics Products i.e. the GenePix 4000B Microarray Scanner and analysis software.

In February 1999, Axon Instruments announced the GenePix 4000A, the first product for genomic studies and high-throughput drug screening using DNA and protein microarrays. This popular two-color scanner capitalizes on technology previously developed at Axon in its imaging and data acquisition systems for cellular neurosciences, but its design also incorporates new optical and precision mechanical technologies as well as innovative software and electronic designs.



The GenePix 4000B is the most userfriendly high performance array scanner available today setting the highest standards in the acquisition and analysis of data from all types of arrays, including nucleic acids, proteins, tissues and cells. Unlike other commercially available array

scanners, the GenePix 4000B acquires data at two wavelengths simultaneously.

Simultaneous acquisition of data reduces scan times drastically (5 minutes for a full scan at 10  $\mu$ m in both channels, and much less for smaller scan areas) and thereby increases laboratory efficiency. Simultaneous scanning also eliminates potential errors associated with aligning two separately scanned images, and

allows real-time access to images and data as they are acquired. The GenePix 4000B acquires data at multiple user-selectable resolutions from 5 to 100 microns displaying images from the two wavelengths and a ratio image as they are acquired in real time. A 40-micron Preview Scan is used to preview the sample and optimize the scanner settings for a 5- or 10-micron high resolution Data Scan. The scan area is infinitely adjustable to minimize scan time and file size. The laser power is dynamically monitored to ensure constant signal output. Laser power can also be attenuated to optimize signal output for a wide variety of sample types.

**Special introductory offer valid until January 15, 2002.  
Netprice: CHF 99'860.- plus VAT.**

- **New Representation**  
AXON Instruments  
Microarray Scanner
- **Introducing FLIPR<sup>2</sup> and FLIPR<sup>3</sup> High Throughput**  
Fluorescence and Luminescence  
Imaging Systems
- **BioDiscovery new ImaGene 4.2**  
Software for microarray  
image analysis
- **Catch Point™ and Calcium Plus™**  
Kits for screening  
molecular targets
- **CO-RE Tip Technology and Dual**  
Liquid Level Detection,  
Hamilton
- **Sequence Analysis "At The Speed of Light"**
- **Pyrosequencing and University of Geneva**  
collaborate on Diagnostic  
Test for Down Syndrome
- **Molecular Devices Acquires Cytion SA in Lausanne**

### Other features of the GenePix 4000B Microarray Scanner:

- automatically reads barcodes
- automatically aligns array templates with spots on an array, subtracts local background, and calculates results.
- dual laser excitation at 532nm and 635nm; alternative lasers available
- adjustable focus
- detection limit of 0.1 fluor/micron<sup>2</sup> for Cy3 and Cy5
- small footprint!

For additional information please use the attached reply card or simply give us a call.

## The FLIPR® system

Molecular Devices introduces the advanced FLIPR<sup>2</sup> and FLIPR<sup>3</sup> systems

Today's screening laboratories face exploding volumes of data, compounds and targets – and pressure to bring new products to market faster than ever before. An effective high-throughput screening (HTS) system must not only provide rapid,

is also ready for screening of glowing- and flash-type luminescence in drug discovery.

New features in FLIPR<sup>3</sup> include a light-tight enclosure, enhanced camera sensitivity with faster frame trans-

erating cell-based high throughput screening:

**FLIPR<sup>2</sup>:** FLIPR<sup>2</sup> is the high-throughput choice for reading intracellular fluorescence assays such as calcium flux and membrane potential.

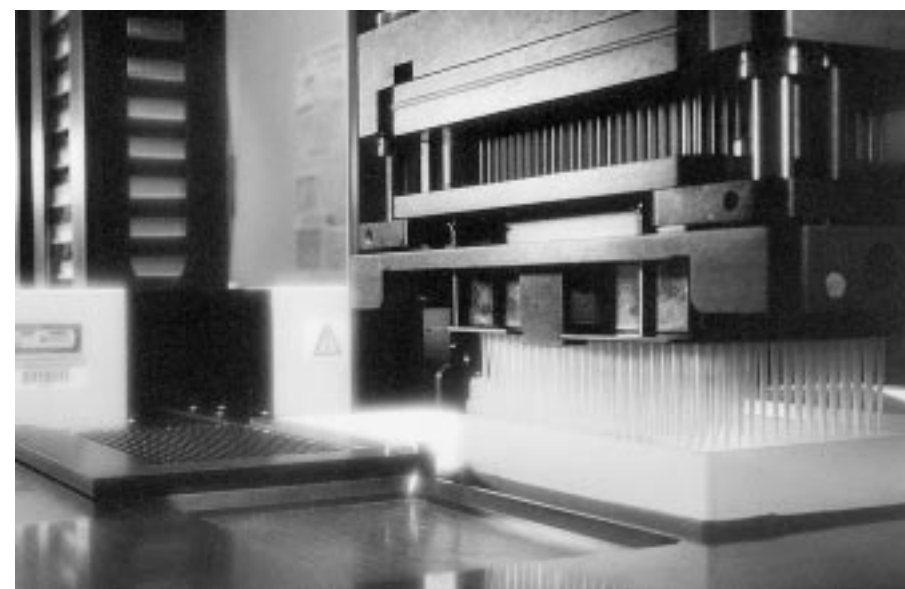
**FLIPR<sup>3</sup>:** With its enhanced sensitivity, FLIPR<sup>3</sup> expands the FLIPR repertoire to include measuring luciferase, aequorin and other luminescent assays.

### Enabling the Detection of Kinetic Luminescence Assays

With the addition of a new and extremely sensitive camera, the high-throughput capabilities of the FLIPR system has been expanded to include measuring luciferase, aequorin or other luminescent assays. FLIPR can simultaneously read all wells throughout the reagent addition process. This ability to read immediately after dispensing enables the precise reading of luminescent assays that yield "flash" luminescence. The flexible pipetting capability of FLIPR allows assays to be configured for agonists, antagonists or multiplexed luminescent signals.

fer for even higher throughput and the new FLIPR controlling software.

The new FLIPR<sup>3</sup> provides extended applications including high sensitive reading of flash-type luminescence assays like aequorin, with kinetic updates at a rate of 0.3 seconds. Two systems specifically for accel-

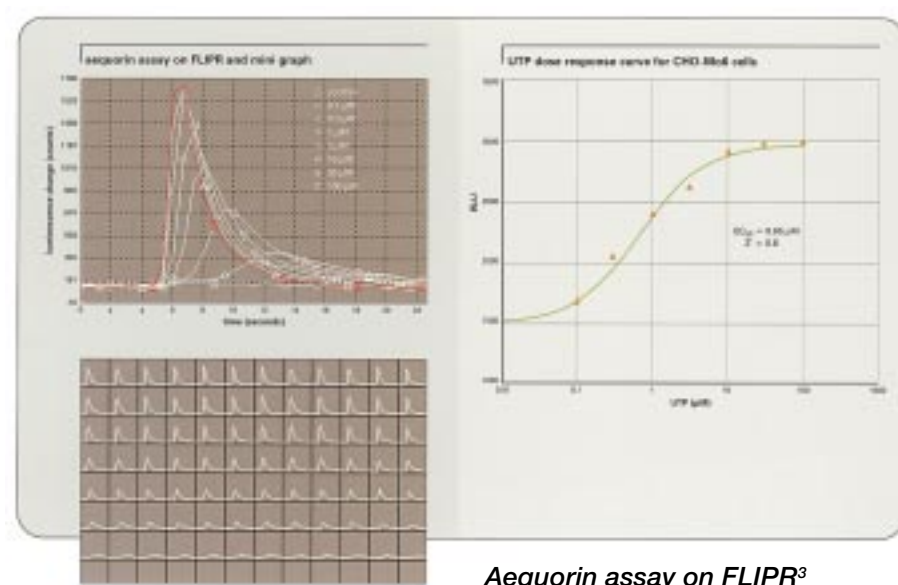


**FLIPR<sup>3</sup>™:** higher sensitivity, faster, multimode fluorescence and luminescence

cell-based screening methods, it must deliver better data, earlier in the screening process.

The Fluorometric Imaging Plate Reader (FLIPR®) system from Molecular Devices is the first system to deliver high-throughput, cell-based assays that provide information-rich kinetic data and significantly reduce hit-to-lead workloads. The FLIPR system rapidly discriminates between full agonists, partial agonists and antagonists to accelerate primary and secondary screening. Widely regarded as the industry standard, FLIPR delivers innovative high performance, enabling research professionals to quickly bring new products to market or research results to publication.

With its traditional fluorescence applications such as calcium signaling, membrane potential or intracellular pH, FLIPR is widely regarded as the industry standard. Now FLIPR



Aequorin assay on FLIPR<sup>3</sup>

## BioDiscovery ImaGene 4.2

Further enhancements in Microarray Image Analysis

ImaGene automates the time consuming process of measuring and visualizing gene expression data from high-density array images and has been accepted as an industry standard in microarray image processing since its introduction in 1997.

Significant changes and improvements have been implemented in ImaGene as a result of the input from many researchers world wide using ImaGene and reporting this success in scientific literature.

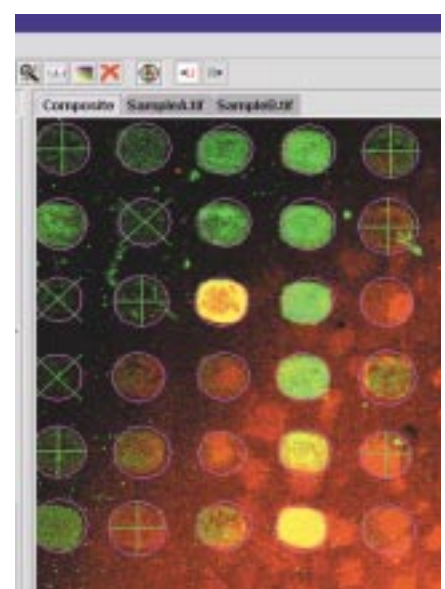
The recently launched ImaGene 4.2 incorporates many new features for array image handling and significantly enhanced spot quality control e.g.:

- Enhanced spot quality flagging using sophisticated algorithms to identify empty spots, poor spots and negative spots.
- Global auto-segmentation to differentiate signal and back-ground pixels and to remove contaminations without user intervention.

- Results file containing quantified spot intensities, spot quality measures and flag information.

• Support of hexagonal array geometries for additional functionality and ease of use.

Please contact us for detailed information on ImaGene 4.2 and other BioDiscovery microarray software solutions.



## CO-RE Technology and Dual Liquid Level Detection with the Hamilton STAR

The newly introduced liquid-handling robot (the Microlab® STAR) is intended to perform medium to high-throughput pipetting tasks in the laboratory. On its large work-space, 4, 8 or 16 individual channels can perform independent pipetting tasks. Each channel is a self-controlled pipette moving in an independent up and down direction (z axis), and performing its own pipetting task.

The instrument uses air displacement, rather than the common column movement of liquid via syringe drives. The departure from this conventional technology allowed the design of a more flexible instrument.

Each individual channel contains two important sensors – one for temperature and one for pressure. The combined capacitance liquid level detection (LLD) with the pressure LLC allows for the first time to detect non-polar liquids as well as bubbles and foam. This results in increased safety for the pipetting process.

The patented CO-RE (Compression-Induced O-Ring Expansion) tip technology assures a defined seal and perfect fit for disposable tips and steel needles. CO-RE also enables a gentle release at the tip and therefore avoids aerosol contamination.

## CatchPoint™ Calcium Plus™

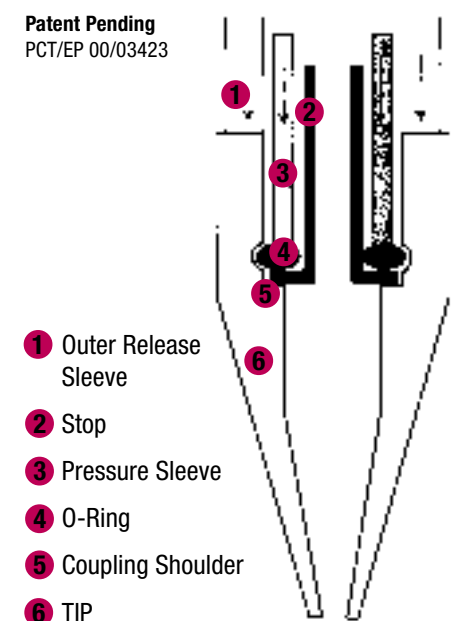
extending the range of assay kits for screening molecular targets using GEMINI, FLIPR and FLEXstation

The new CatchPoint™ assay kit is designed to monitor cAMP levels and the activity of adenylate cyclase. Based on a competitive immunoassay format CatchPoint™ detects cAMP at highest sensitivity (detection limit 0.1 nM cAMP) at minimized handling constraints with a single wash step and flexible read time. The assay is analyzed by fluorescence intensity and is ideally suited for GEMINI XS and FLEXstation fluorescence reader from Molecular Devices.

The new Calcium Plus™ Assay Kit measures intracellular calcium release and is optimized for chemokine receptors and small peptide targets. With the mix-and-ready principle, eliminating any wash steps, this kit is highly suitable for high-throughput screening by e.g. FLIPR or FLEXstation. The Calcium Plus™ Assay Kit now brings the chemokines and their receptors into drug discovery screening.

## CO-RE stands for Compression Induced O-Ring Expansion

Patent Pending  
PCT/EP 00/03423



**Absender:**

Name/Titel:  
Name/Title:

Firma/Universität:  
Company/University:

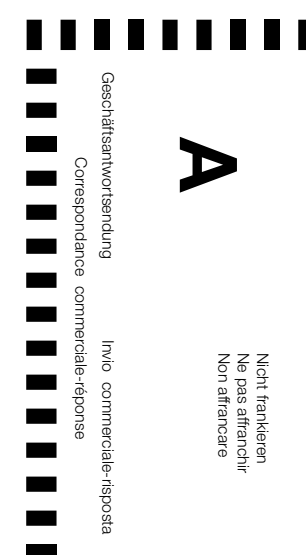
Abteilung/Institut:  
Dept./Institute:

Strasse/Nr.:  
Street/No.:

PLZ/Ort:  
Zip Code/City:

Tel. Nr.:  
Phone:

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Analytik und Biotechnologie  
Schützengraben 7  
4051 Basel



Nicht frankieren  
Ne pas affranchir  
Non affrancare

**Absender:**

Name/Titel:  
Name/Title:

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Company/University:

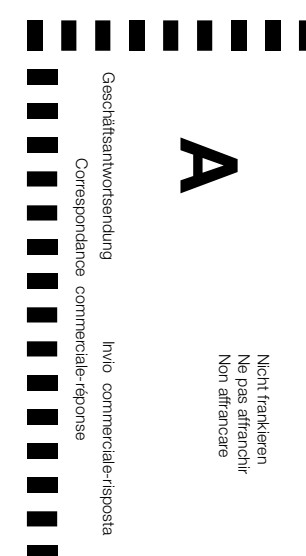
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