



# PRODUCT CATALOGUE

*Linking scientists with precision tools*

**Scintica:**

## ABOUT SCINTICA

At Scintica, we focus on providing high-value instrumentation to scientists and the preclinical research community to advance science and medicine.

We are aware of the tremendous amount of information that scientists face when trying to understand which equipment can serve their research needs best, and the difficulties instrumentation manufacturers have in communicating their products and benefits to the research community.

Our strong focus on education within science and the roles that various technologies play in advancing research provides a new medium of communication between scientists, which is most efficient.



### OUR MISSION

Our mission is to link scientists with the right research solutions and instruments they need to advance research.



## OUR MANUFACTURING PARTNERS

**IVIM**  
TECHNOLOGY

**INDUS**  
INSTRUMENTS

**BRIGHTONIX**  
I M A G I N G

**VILBER**

**poietis**

**BAKER RUSKINN**

**Invicro**  
A Konica Minolta Company

**SEDECAL**

**PhotoSound**  
Imaging and Data Acquisition Solutions

**OsteoSys**

**LIVING SYSTEMS**  
INSTRUMENTATION  
Innovations for vascular research

**RWD**

**cyto**  
smart

**#S-Sharp**

**aspectimaging**

**OptiScan**

**Myr**

**LUCID**  
SCIENTIFIC

**MDE**  
RESEARCH

**MEDVISO**

**TRUST**  
BIO SONICS

# Scintica:

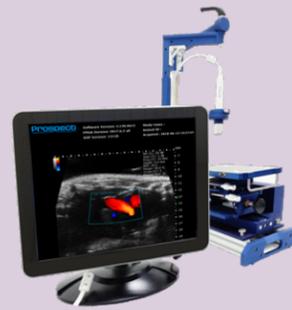
# TABLE OF CONTENTS

|  |    |
|--|----|
| <b>PRECLINICAL IMAGING</b>                               |    |
| Ultrasound – Prospect T1 .....                           | 6  |
| DXA – iNSiGHT  |    |
| MRI – M-Series   |    |
| PET/MR – M7 SimPET                                       |    |
| PET Insert – SimPET .....                                | 7  |
| PET/CT – SuperArgus                                      |    |
| Compact PET & CT – Argus                                 |    |
| Photoacoustic – TriTom .....                             | 8  |
| Optical Bioluminescence and Fluorescence – Newton 7.0    |    |
| VILBER Gel Documentation                                 |    |
| Western Blot Fluorescence and Chemiluminescence – Fusion |    |
| Intravital Microscopy – IVM .....                        | 9  |
| Laser Speckle – RFLSI III                                |    |
| Confocal Endomicroscope – FIVE2                          |    |
| Microbubble Contrast Agents – USphere                    |    |
| Ultrasound – Prodigy .....                               | 10 |
| Image Analysis Software – VivoQuant                      |    |
| Cardiac Image Analysis Software – Segment                |    |
| <b>BIOFABRICATION</b>                                    |    |
| Bioprinter – NGB-R .....                                 | 11 |
| <b>PHYSIOLOGICAL MONITORING &amp; TELEMETRY</b>          |    |
| Doppler Blood Flow – DFVS .....                          | 11 |
| Rodent Surgical Monitor – RSM+                           |    |
| Rat and Mouse Telemetry .....                            | 12 |
| <b>STEREOTAXIC &amp; RESEARCH PRODUCTS</b>               |    |
| Stereotaxic Equipment .....                              | 12 |
| Intelligent Optogenetic Systems                          |    |
| Precise Impactor .....                                   | 13 |
| Microcentrifuge and Refrigerated Microcentrifuge         |    |
| Minux Cystostats   |    |
| Fiber Photometry System                                  |    |
| Automated Cell Counter .....                             | 14 |
| Minux Rotary Microtome                                   |    |
| <b>ANATOMICAL PATHOLOGY</b>                              |    |
| Spin Tissue Processor – STP-120 .....                    | 14 |
| Paraffin Embedding Center – EC 350 .....                 | 15 |
| Paraffin Embedding Center – EC 500                       |    |

# TABLE OF CONTENTS

|   |         |
|---|---------|
| <b>ANATOMICAL PATHOLOGY (Continued)</b>                     |         |
| Rotary Microtome – M-240 .....                              | 15      |
| Automated Slide Stainer – SS-13                             |         |
| <b>ANESTHESIA SOLUTIONS</b> .....                           | 16 - 17 |
| Small Animal Anesthesia                                     |         |
| Vaporizers  |         |
| Multi-Function Anesthesia Solutions                         |         |
| Face Masks  |         |
| Induction Boxes   |         |
| Heating Pads  |         |
| Oxygen Concentrators  |         |
| Active Evacuating Units                                     |         |
| Gas Filter Canisters  |         |
| Ventilators   |         |
| Flowmeters  |         |
| Large Animal Anesthesia Systems                             |         |
| <b>IN VITRO &amp; EX VITRO RESEARCH</b> .....               | 18 - 19 |
| Laboratory Consumables                                      |         |
| Pressure Arteriography                                      |         |
| Wire Myography  |         |
| <b>TISSUE OXYGENATION</b>                                   |         |
| Tissue Oxygen Monitoring – OxyLite + OxyLite Pro .....      | 20      |
| Tissue Blood Flow Monitoring – OxyFlo + OxyFlo Pro          |         |
| OxyLite + OxyFlo Combo Systems                              |         |
| Dissolved Oxygen Monitor – Resipher                         |         |
| <b>CELLULAR RESEARCH</b>                                    |         |
| Colony and Spheroid Counter – GelCount .....                | 21      |
| Live Cell Imaging, Brightfield – Lux 2                      |         |
| Live Cell Imaging, Brightfield and Fluorescence – Lux 3 FL  |         |
| Live Cell Imaging – Omni                                    |         |
| <b>WORKSTATIONS &amp; INCUBATORS</b>                        |         |
| Isolation Box for Cell Culture – CondoCell .....            | 22      |
| Hypoxia Chamber – PhO <sub>2</sub> x Box                    |         |
| Physoxic/Hypoxia Chamber – OxyGenie                         |         |
| <i>In Vivo</i> Oxygen Control Chamber – VelO <sub>2</sub> x |         |
| Anaerobic & Microaerophilic Workstation – BugBox .....      | 23      |
| Anaerobic & Microaerophilic Incubator – Concept             |         |
| Incubator – ReCO <sub>2</sub> ver                           |         |
| Hypoxia Workstation – InvivO <sub>2</sub>                   |         |
| Hypoxia Workstation – SCI-tive .....                        | 24      |

# Preclinical Imaging



## Ultrasound – Prospect T1

*Compact, High-Frequency Preclinical Ultrasound Imaging*

The Prospect T1 is a high-frequency ultrasound system specifically designed to image a variety of small animal models including: mice, rats, zebrafish, and similarly sized species. With its compact design and ergonomic animal handling system, this first tablet-based ultrasound system has a drastically reduced footprint within the laboratory environment while maintaining high performance. The standard configuration comes with the full complement of imaging modes: with optional 3D imaging, image-guided mount, shear wave elastography, and integrated sonoporation device. As a non-invasive technique, ultrasound imaging is well suited for longitudinal studies in cardiac, vascular, cancer, ophthalmology, and developmental biology.



## PET Insert – SimPET

*Simultaneous PET/MRI Solution - Stand Alone or Insert*

The SimPET insert is a compact and reliable small animal imaging system for simultaneous PET/MR imaging. The SimPET series is based on advanced silicon photomultiplier (SiPM) technology. There is a selection of models varying in inner diameter and axial field of view, making them ideally suited to image small animal models, including mice and rats. The insert is optimized for use with some of the most installed superconducting high-field (>3T) MRI systems, found in many preclinical imaging laboratories around the world. It has also been integrated into the M-Series (M7 specifically) compact MRI system.



## DXA – iNSiGHT

*DXA System for Body Composition Analysis*

The iNSiGHT is a fully shielded DXA (DEXA, dual-energy x-ray absorptiometry) system designed specifically for preclinical small animal models such as mice and rats. The DXA technology provides quantification of body composition, such as bone mineral density (BMD), bone mineral content (BMC) and measures of lean vs. fat mass. Data and images are collected in 25 seconds allowing for high throughput data collection, while coefficient of variation calculations confirms high reproducibility of the data. This system is well suited to study bone metabolic disorders, as well as other metabolic disorders effecting muscle and fat mass.



## PET/CT – SuperArgus

*Preclinical PET/CT Imaging*

The SuperArgus PET/CT systems are available in a variety of models suitable for imaging a variety of species, including mice, rats, marmosets, rabbits, all the way up to non-human primates. The systems are self-shielded, making them easy to site in an existing laboratory space. The phoswich detectors are the key to many of the unique features including true depth of interaction (tDOI) information to correct the parallax error and providing resolution ( $\leq 1.0\text{mm}$ ) uniformity across the entire field of view. These detectors are also some of the most sensitive on the market, allowing for conscious/awake animal imaging in real-time.



## Compact MRI – M-Series

*MRI Instrumentation for Small Animals*

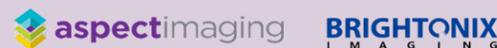
The M-Series systems are compact, self-shielded, high-performance MRI systems. The M-Series allow preclinical researchers, with or without in-depth knowledge of MR physics, to utilize the gold standard method of soft tissue imaging without conventional MRI systems' cost, complexity, and technical burden. No special infrastructure is required, and they can be easily integrated into existing lab space as it is self-shielded. These 1T systems are optimized for contrast agents and anatomical applications such as cancer, cardiac, neuroscience, and multimodal imaging. The M-Series also have the flexibility to customize acquisition sequences and integrate multimodal imaging using the SimPET insert.



## Compact PET – Argus

*Preclinical PET Imaging Systems for Small Animals*

The Compact PET system incorporates the same state-of-the-art detectors as the SuperArgus systems. The compact systems have a bore size of 55mm making it ideal for mouse imaging. There is a common bed to transport the animal between the Compact PET and Compact CT systems if co-registration of the data and images are required. The core of the compact scanner is the unique phoswich PET detector technology, which provides true depth-of-interaction (tDOI) to correct the parallax error and providing resolution ( $\leq 1.0\text{mm}$ ) uniformity across the entire field of view.



## PET/MR – M7 + SimPET

*Simultaneous PET/MR imaging*

The M7 + SimPET is a compact and multimodal imaging system for simultaneous PET/MR imaging. The M7 provides optimized imaging protocols for a variety of anatomical targets, thus providing complementary 3D anatomical images to those acquired using the SimPET insert. The SimPET insert is state-of-the-art, compact, with low power consumption and excellent PET detector stability that fits within the M7 MRI. The SimPET is based on advanced silicon photomultiplier (SiPM) technology for truly simultaneous PET/MR imaging. This system combines all the benefits of the M7 MRI with the state-of-the-art SimPET insert.



## Compact CT – Argus

*Preclinical PET Imaging Systems for Small Animals*

The Compact CT system has been designed for high-throughput longitudinal studies by minimizing the radiation exposure to the imaging subject. The system is also self-shielded making it easy to site in any existing laboratory space. The compact systems have a bore size of 55mm making it ideal for mouse imaging. A maximum resolution of 65 $\mu\text{m}$  is achieved within a 30-second scan. In addition there is a common bed to transport the animal between the Compact PET and Compact CT systems if co-register of the data & images are needed.



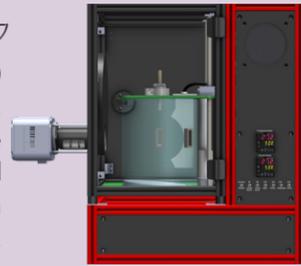
# Preclinical Imaging



## Photoacoustic – TriTom

*Small Animal Whole Body Photoacoustic Fluorescence Tomography (PAFT)*

The TriTom systems combine both photoacoustics and fluorescence tomography (PAFT) technology specifically designed for use on small animal models, including mice and rats. Available models combine complimentary imaging modalities and enable co-registration of the high-resolution photoacoustic and high contrast fluorescence tomographic images. Combined PAFT provides superior anatomical, functional, and molecular information. PAFT is applicable in a wide range of longitudinal studies in areas of cancer, toxicology, and developmental biology, along with tissue engineering and regeneration.



## IntraVital Microscopy – IVM

*All-In-One In Vivo IntraVital Microscopy*

IntraVital Microscopy is an all-in-one confocal/two-photon microscopy system designed and optimized for imaging live animal models. The platform is designed to overcome existing challenges associated with conducting *in vivo* longitudinal studies using conventional confocal and two-photon systems suitable for endpoint histological analysis on sectioned tissues. Animal maintenance platform, motion compensation function, and ultra-fast frame rate allow for the acquisition of high-resolution images of all tissues and organs in the body. Monitoring the dynamics of biological phenomena at cellular and subcellular resolution *in vivo* and overtime is a next-generation core technology to unravel biology in healthy and diseased states.



## Optical (BLI & FLI) – Newton 7.0

*Optical: Fluorescence, Bioluminescence, and 3D Tomography*

The Newton 7.0 is a highly sensitive preclinical optical imaging system dedicated to bioluminescence and fluorescence imaging of small animal models and *ex vivo* samples. The system is compact and quite easy to operate, and the running and maintenance costs are very low. It can be installed in almost any existing lab space. The Newton 7.0 Bio has been specifically designed to study plants with minimal manipulation. The system combines high sensitivity optics with advanced plant imaging features and user-friendly, time saving operation.



## Laser Speckle – RFLSI III

*Laser Speckle Imaging System*

The RFLSI III Laser Speckle Imaging System is based on LSCI (Laser Speckle Contrast Imaging) technology. With the advantages of its non-contact, high time resolution, high spatial resolution, and full-field rapid imaging, it provides a real-time dynamic blood flow monitoring and recording method for research in life sciences.



## Gel Documentation

*Laboratory Standard for DNA and RNA Gel Imaging*

VILBER Gel Documentation systems are the ideal imaging platform for any lab or core facility. The Super-Bright UV illumination and filter technology enhances the image quality especially for DNA and RNA gels. The compact darkroom is made entirely of stainless steel and aluminium. Fluorescence is the main method used for gene expression and protein detection.



## Confocal Endomicroscope – FIVE2 (ViewnVivo)

*Fluorescence Endomicroscope*

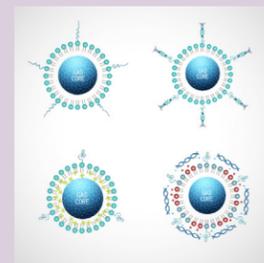
The FIVE2 (ViewnVivo) B30 is the latest miniaturized fluorescence endomicroscope from Optiscan, optimized for real-time preclinical research *in vivo* imaging in animal models. While the FIVE2 (ViewnVivo) B30 comes to life *in vivo*, there is no reason why it can not be used for *ex vivo* research as well.



## Western Blot (FLI & CLI) – Fusion

*Fluorescence and Chemiluminescence Western Blot Systems*

The VILBER Fusion system line is ideal for quantification grade imaging. Chemiluminescent Western blot data poses distinct challenges in producing quantifiable and reproducible data. Most of these issues are a result of low-dynamic range of detection and difficulty in accurately determining the limit of detection. The Fusion systems eliminate all these issues thanks to High Sensitivity Reading (HSR) camera technology that delivers reliable dynamic range, linearity, and unsurpassed sensitivity for the lowest limit of detection. The advanced camera technology reduces noise allowing faint signals to stand out from the surrounding background.



## Microbubble Contrast Agents – USphere

*Microbubble Contrast Agents for Ultrasound Imaging*

The USphere microbubble contrast agents have been designed for use in any sized preclinical research models, and can be used with ultrasound systems operating at 1 to 40MHz, including the Prospect T1. Plain microbubbles, fluorescently labelled or not, can be used to visualize perfusion in a variety of imaging targets including tumors, abdominal organs, etc. and may be relevant from basic research studies to translational drug development projects. While target-ready microbubbles may be used to detect specific biomarker on the endothelial cell wall, positively charged microbubbles may be used to deliver a payload of RNA or DNA for gene transfection at a specific site.



# Preclinical Imaging

# Biofabrication

## Ultrasound – Prodigy



*Compact and High-Performance Ultrasound System for Engineering Research*

The Prodigy is a compact, high-performance ultrasound system optimized for a variety of ultrasound research applications. There are 2 available configurations within the Prodigy 256 architecture; one with 128 channels and the other with 256 channels, both transmit and receive. Connectors can be freely switched using multiplexers so the maximum supported transducer channel is up to 512. The Prodigy supports many ready-for-use image modes including basic modes (B / Color / PW / M / PS / SA) and advanced modes (trapezoidal or steerable scanning / multi-beam / multi-focus / spatial compounding / coded excitation / harmonic imaging / triplex / duplex). The Prodigy also provides a special pulse-sequence mode with a well-developed user interface, in which the user can program their own transmit and receive parameters or sequences.



## Bioprinter – NGB-R



*Next-Generation Laser Assisted 4D Bioprinting*

The NGB-R is a multi-modal and high-end 4D bioprinting system combining laser-assisted, micro-valve, and extrusion bioprinting technologies. It enables true versatility of bioprinting (from cell to spheroids) and offers the possibility of using a wide array of biomaterials and hydrogels. The NGB-R is equipped with a 6-axis robotic arm and a built-in microscope allowing programmed and automated fabrication of tissue-engineered products of standard quality, controlled step-by-step. NGB-R bioprinters are designed to fabricate tissues with high-resolution and complexity for tissue engineering applications, therapeutics and cosmetics testing. The NGB-R facilitates the development of scalable solutions and accelerate the translation of tissue-engineered therapeutics to the clinic.

# Imaging Software

# Physiological Monitoring

## Image Analysis Software – VivoQuant



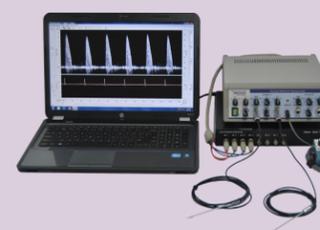
*Quantitative Analysis for Discovery and Post-Processing Software Suite for Image Data*

VivoQuant is Invicro's quantitative image analysis platform. As a vendor neutral software product, VivoQuant streamlines image analysis research studies across all phases of drug discovery and development, supporting multi-modality and multi-species image processing applications. In addition, VivoQuant combines essential viewing functionality with powerful tools for fine-tuning images, isolating and analyzing regions of interest, and more.

## Doppler Blood Flow – DFVS



*Non-Invasive Measure of Cardiovascular Physiology*



The Indus Instruments Doppler Flow Velocity System (DFVS) is a proven and cost-effective alternative to conventional imaging systems. Small handheld probes easily and reliably measure blood velocity in the heart and the arteries of rodents, fish and other animal models making serial studies of cardiac and arterial function available to more labs than ever before. Pulsed wave Doppler signals from the transceiver are digitized at a high sampling rate and sent to the workstation display.

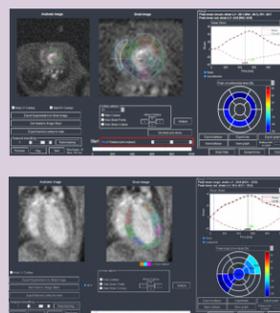
*Animals Models*



## Cardiac Image Analysis Software – Segment

*Cardiac Function Analysis Software*

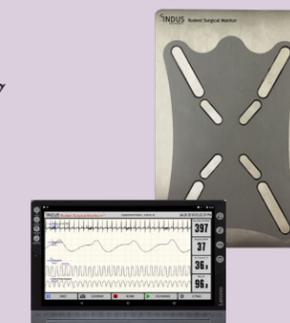
The Segment application is a comprehensive software solution for quantitative cardiac MR image analysis; the software has been specifically designed for preclinical research and will work with images acquired with the M-Series MRI systems. The Segment tool employs advanced artificial intelligence (AI) algorithms to facilitate faster analysis of both left ventricle (LV) and right ventricle (RV) function. In addition, the Segment has modules for delayed contrast enhanced imaging with automatic scar segmentation, as well as optional modules for strain analysis, PACS integration, and other tools to streamline cardiac MRI analysis.



## Rodent Surgical Monitor – RSM+

*Integrated Surgical Warming and Vital Signs Monitoring*

The Indus Instruments Rodent Surgical Monitor is an advanced, integrated surgical warming and vital signs monitoring solution for preclinical research in mice, rats and other small animals. The system provides detailed information, in real-time, regarding subject body temperature, ECG, heart rate, pressure and respiration. In addition the system incorporates intelligent zone heating, ultra-low noise, high-resolution ECG electronics, noninvasive electrodes and a port for external needle electrodes for when subjects cannot be laid prone or supine.



# Telemetry

## Telemetry

*Telemetry with Wireless Technology for In Vivo Physiologic Monitoring*

The Indus Instruments Small Animal Telemetry System and associated wireless implants offer a simplified and cost-effective approach to studying physiology in conscious, unrestrained small animals. Scientists are able to monitor ECG, heart rate, core body temperature and activity in multiple, socially housed animals simultaneously.



## RWD

## Precise Impactor

The Precise Impactor is used for traumatic brain injury and spinal cord injury models. The system adopts pneumatic-electric control, which can precisely adjust the speed, depth, and dwell time to achieve precise impact. The zero method uses a sensor contact mechanism to automatically detect the zero interface, which is sensitive and efficient. Standard cylindrical head hammers with different sizes are available. It is an accurate tool with high efficiency, repeatability, and stability, ensuring reproducibility of the damage model.

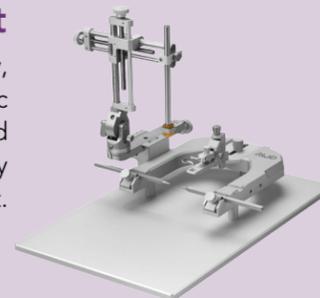


# Stereotaxic & Other Research Products

## RWD

## Stereotaxic Equipment

Stereotaxic instruments are widely used in many fields such as neuroanatomy, neurophysiology, neuropharmacology, and neurosurgery. RWD offers a series of stereotaxic instruments to meet the experimental needs of rat, mouse, guinea pig, rabbit, monkey, and other animal models. Moreover, RWD stereotaxic instrument is fully equipped, which greatly improves the applicability of each stereotaxic instrument.



## RWD

## Minux Cryostat

The cryostat features superior usability with excellent safety standards for all types of cryo-sectioning applications. This Cryostat is able to cut tissues at temperatures as low as -35 °C. When working with delicate specimens the system will provide reproducible, thin, serial sections of best quality. The tissue can be flattened, and the freezing is expedited with a steel weight/heat extractor to provide a smooth flat-cutting surface. Fully automated and semi-automated versions are available.



## Intelligent Optogenetic System

Optogenetics is an emerging technology that uses optical principles and genetic engineering to make specific cell groups express or lack a certain function. It has two unique characteristics: high spatial and temporal resolution and cell-type specificity. Using genetic methods to express light-sensitive channel proteins in specific cell populations. These light-sensitive channel proteins will open under specific wavelengths of light to pump protons out of the cell, or anions (such as Cl<sup>-</sup>), cations (such as Na<sup>+</sup> and K<sup>+</sup>) Pumped into the cell to hyperpolarize or depolarize the cell, so that the cell can be inhibited or excited instantly.



## RWD

## Fiber Photometry System

Fiber photometry has become the technique of choice for many researchers in the field of systems neuroscience because of its: relative simplicity compared to other *in vivo* recording techniques, high signal-to-noise ratio, ability to record in a variety of behavioral paradigms. It is most commonly used in conjunction with genetically-encoded calcium indicators (GECIs, the GCaMP series).



## RWD

# Stereotaxic & Research Products

**RWD**

## Automated Cell Counter

Cell counters are tools for counting live and/or dead cells in a culture. The C100 is a perfect cell counting option for any lab. It is appropriate for a variety of samples, including mammalian cells, stem cells, blood cells, epithelial cells, endothelial cells, and more. The automated cell counter uses microscopy with auto-focus technology that analyzes and counts cells in less than 20 seconds, with no user input. The sophisticated cell counting algorithm uses the image acquired to detect cells and omit debris, for an accurate total cell count.



**Myr**

## Paraffin Embedding Center – EC 350

*Modular Tissue Embedding Center for Paraffin Blocks*

The EC 350 is a modular tissue embedding center for paraffin blocks. It consists of two separate modules: a dispensing console with a 5L paraffin reservoir and a cryo console with space to cool up to 60 cassettes/molds at a time. This customizable system was designed with flexibility in mind and to achieve maximum efficiency and operator comfort.



## Minux Rotary Microtome

The microtomes feature superior usability with excellent safety standards for all types of sectioning applications. When working with delicate specimens the system will provide reproducible, thin, serial sections of best quality every time.

**RWD**



## EC 500 – Paraffin Embedding Center

*Modular Tissue Embedding Center for Paraffin Blocks*

The EC 500 is a modular tissue embedding center for paraffin blocks. It consists of three separate modules: a dispensing console with a 5L paraffin reservoir, a cryo console with space to cool up to 60 cassettes/molds at a time, and a thermal console with high capacity cassette storage.

*\*Compared to the EC 350, the EC 500 consists of three separate modules with increased storage and working room.*

**Myr**

# Anatomical Pathology

**Myr**

## Rotary Microtome – M-240

*Semi-Automated Rotary Microtome*

The M-240 microtome from Myr uses state-of-the-art technology and embodies the company's commitment to quality and excellence in microtomy. It provides the operational convenience and stability required for routine sectioning in research and industrial applications. The M-240 is a semi-automated microtome and has been designed with ease of use, safety, and efficiency in mind.



## Spin Tissue Processor – STP-120

*Spin Tissue Processor for Tissue Infiltration*

The Myr Spin Tissue Processor STP-120 has been developed to meet the requirements of every laboratory. The state-of-the-art technology and the unsurpassed processing method of the STP-120 qualifies it as the most successful spin tissue processor ever. With more than 3000 units installed around the world confirms its leading position. The Myr Spin Tissue Processor STP-120 employs a patented and unique technique that combines several movements for the tissue to achieve perfect infiltration results.

**Myr**

## Automated Slide Stainer – SS-30

*Automated Slide Stainer*

The SS-30 is an automatic slide stainer from Myr that has been designed for continuous loading to maximize efficiency and productivity in the lab. The system has a multi-staining capability that allows simultaneous and automatic staining of various 30-slide racks with identical or different staining protocols. The SS-30 was created to occupy less space without compromising slide training productivity and is ideal for labs with shallow benches, no space is wasted.



**Myr**

# Anesthesia Products

## Anesthesia Solutions

*For Small Animal Research*

There is growing demand for anesthesia equipment designed for small laboratory animals. RWD designs and manufactures complete anesthesia systems and accessories for the smallest preclinical research subjects. These systems are designed to deliver highly effective anesthesia with depth modulation. The systems are also designed with user safety as a priority. It includes excellent waste gas scavenging to protect users from the negative effects of short-term exposure to anesthetic gases.

RWD

### Small Animal Anesthesia Machine



These systems can offer improved level of control over depth and duration of anesthesia, especially for prolonged procedures.

### Vaporizers



Vaporizers are available for isoflurane or sevoflurane; both easy and key fill options are available.

### Multi-Function Anesthesia Solution



These are perfect for new labs or if you are in the process of upgrading your current system.

### Face Masks



For inhaled anesthesia, with gas recovery, without respiration support.

### Induction Box



For rapid induction (only 2-5 minutes) of anesthesia before animal surgery.

### Oxygen Concentrator



The high purity oxygen is separated from the air by molecular sieve pressure swing adsorption (PSA) technology.

### Heating Pads



Small animal homeothermic support and monitoring system.

### Active Gas Evacuating Unit



This unit was designed to safely and actively remove waste gas associated with inhalation anesthesia.

### Gas Filter Canisters



Disposable canisters used to absorb isoflurane, sevoflurane, enflurane, and other gases; large and small sizes available.

### Ventilators



Designed for scientific research, such as rat/mouse cardiopulmonary or respiratory experiments, to maintain or improve pulmonary ventilation experiments.

### Flowmeters



RWD anesthesia is equipped with an extended flow meter mounting position, which expands a variety of gas flowmeters to meet the need of a variety of gas supplies.

### Large Animal Anesthesia System



Large animal veterinary anesthesia machines provide clinical anesthesia for dogs, cats, pigs, monkeys, and rodents.

# In Vitro & Ex Vivo Research

## Pressure Arteriograph System



*Apply and Maintain Physiological Pressures in Cannulated Blood Vessels*

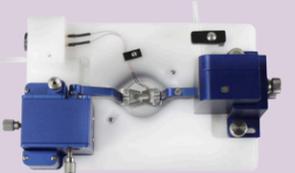
Pressure Arteriography is the gold standard for quantifying function, reactivity and mechanics in isolated perfused blood vessels. When embarking on pressure arteriography, many factors warrant consideration. In addition to the requisite surgical skills for isolating and cannulating small arteries, proper instrumentation is also paramount. Pressure arteriography, while a powerful tool, comprises a number of different hardware and software components that must integrate and operate properly.



## Wire Myograph System

*Classic Halpern/Mulvany Style Wire Myograph*

Wire Myography is an *in vitro* technique that allows us to examine functional responses and vascular reactivity of isolated small resistance arteries. Vessels from various species, including transgenic models, and vascular beds can be examined in a variety of pathological disease states. Vessels are dissected, cleaned, and then mounted onto a channel myograph under isometric techniques. Each vessel is then normalized to determine maximum active tension development. This allows the standardization of initial experimental conditions, an important consideration when examining pharmacological differences between vessels.



### Aeration & Oxygenation



Our gas dispersion products provide ultra-fine bubble generation for optimal and minimally-disruptive aeration. Our oxygenators offer non-foaming and efficient gas exchange performance.

### Dissection Dishes



Use our high quality, tack and bubble-free silicone coated dissection dishes.

### Cannulae



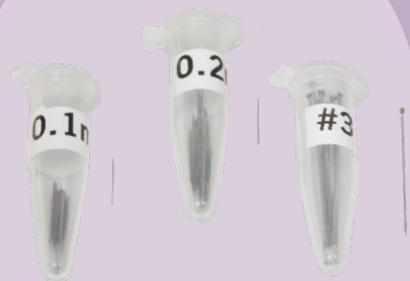
Our glass cannula packs contain one dozen high quality hand-made pipettes. Tips are ground and polished to have a distinct beveled edge, which facilitates vessel cannulation.

### Tools



The importance of quality dissection instruments cannot be overstated. We carry dissection platforms, forceps, scissors, and dissections kits.

### Dissection Pins



These stainless steel dissection pins are well-suited for a variety of applications.

### Flow



Our flow instruments are designed to aid the researcher performing experiments under various flow and pressure conditions.

### pH Meters & Electrodes



We offer specialized accessories for making pH measurements while using our vessel chambers.

### Electric Field Simulation



Our STIM-150I stimulator packages are useful for applications requiring electric field stimulation. Each package includes a constant current stimulator(s), power supply cabinet, computer interface card, CATSTIM software, and interface cables. The output of each stimulator is accessible via a BNC connector.

### Temperature



We offer equipment that will enable an investigator to control temperature via an external superfusion setup, or by directly heating the chamber bath. Most chambers can be heated by either method, with the addition of some equipment components.

### Video



Capture your data on video with our video equipment. Use our high-quality video cameras measure blood vessel diameter with our Video Dimension Analyzer to track blood vessel diameter and left and right wall thicknesses by using an analog video signal.



## Tissue Oxygen Monitor – OxyLite + OxyLite Pro

*Dissolved Oxygen (pO<sub>2</sub>) and Temperature Monitor*

Utilizing optical fluorescence technology, the OxyLite oxygen monitors allows scientists to directly and continuously measure dissolved oxygen in the normal physiological as well as hypoxic ranges, both in experimental *in vivo* models, or in any number of *in vitro* applications. This technology offers key advantages over other measurement methods making OxyLite much easier to use and ideally suited to oxygen measurements in the typical physiological range, and especially in conditions of hypoxia. Applications include cancer biology, angiogenesis, stroke and brain injury, vital organ and muscle tissue monitoring, flap monitoring, ophthalmology, wound healing, as well as dissolved oxygen monitoring in cell culture, bioreactors etc.



## Colony and Spheroid Counter – GelCount

*Colony and Spheroid Counter*

The GelCount is a simple-to-use, software-operated colony counter that automates the whole process of counting and analyzing mammalian cell colonies in petri dishes, multi-well plates, and some T25 flasks. These colonies may be adherent (2D; usually stained), or non-adherent and unstained (freely floating in a semi-solid 3D matrix like methylcellulose or soft agar). The GelCount therefore provides an effective and economical alternative to the highly subjective and labor-intensive task of manually counting colonies in colony forming cell assays.



## Tissue Blood Flow Monitor – OxyFlo + OxyFlo Pro

*Laser-Doppler Tissue Blood Flow Monitor*

Utilizing the latest in laser Doppler flowmetry, the OxyFlo delivers accurate tissue blood perfusion measurements, which is critical information in a number of research applications where blood supply has been disrupted in *in vivo* models of ischemia related disorders. The pioneer in LDF technology, the 3<sup>rd</sup>-generation OxyFlo combines contemporary design, plug and play convenience and touch-screen operation to provide one of the most advanced and reliable blood flow monitors on the market. Typical applications include peripheral vascular disorders, cerebral perfusion in models of stroke and brain injury, tumor perfusion/angiogenesis, blood flow in free flaps and pedicle flaps, wound healing, surgery, transplantation and more.



## Live Cell Imaging – Lux 2

*Real-Time Cell Culture Monitoring and Analysis, Brightfield*

The CytoSMART Lux2 is a highly compact, easy to use, and affordable inverted microscope for bright-field live-cell imaging, specially designed to operate in any standard CO<sub>2</sub> incubator. Monitor routine cell culture processes or take advantage of the advanced CytoSMART algorithms to monitor cell proliferation, motility and morphology for hours up to weeks at a time.



## OxyLite and OxyFlo Combined

*Tissue Oxygen, Blood Perfusion, and Temperature Monitor*

The ability to combine the OxyLite and OxyFlo brings the opportunity to researchers to measure both tissue oxygen, blood perfusion and temperature simultaneously from the same tissue micro-region. The only probe of its kind, the propriety "Triple Sensor" combines both these technologies into a single sensor that connects to both OxyLite and OxyFlo monitors. A truly unique and powerful instrument that can be used in many research models including tumor angiogenesis, vital organ transplantation and shock, cerebral stroke, brain and spinal cord injury and tissue flap surgery/wound healing. The combined OxyLite/OxyFlo system offers the complete measure of tissue vitality.



## Live Cell Imaging – Lux 3 FL

*Real-Time Fluorescence Cell Culture Monitoring and Analysis, Brightfield*

The CytoSMART Lux3 FL is a small fluorescence live-cell imaging microscope equipped with one bright-field and two fluorescent channels (green and red). The Lux3 FL allows users to track dynamic cellular processes with high specificity by taking high-quality images to create real-time time-lapse movies. Collect real-time data on gene expression, cell-cell interactions and many other cellular processes without removing your cells from their culture environment.



## Dissolved Oxygen Monitor – Resipher

*Precise Dynamic Oxygen Consumption Reader*

The Resipher is a handheld device that rests on top of a multi-well plate and non-invasively measures oxygen consumption rate (OCR) for days to weeks from inside an incubator or workstation. The device interfaces a sterile/disposable lid with probes (500µm diameter) that extend into the media directly above the cells. Data can be accessed via the web based streaming platform so that cells can be analyzed from anywhere.



## Live Cell Imaging – Omni

*Real-Time Whole Plate Cell Culture Monitoring and Analysis*

To help life science researchers improve their understanding of cellular processes, CytoSMART Technologies has developed an automated bright-field microscope that can visualize an entire surface of a cell culture vessel and operate from inside a standard CO<sub>2</sub>-incubator, biological safety cabinet, or on a bench-top. Not limited to a specific type or quantity of culture vessels, the CytoSMART Omni captures cellular behavior by creating high-quality time-lapse videos for days or even weeks at a time.



# Workstations & Incubators

## Isolation Box – CondoCell

*Isolation Box for Cell Culture*

CondoCell captures the environment of any incubator or workstation making continuous, uninterrupted culture accessible to all. When coupled with a workstation, CondoCell helps avoid any disruption in the delivery of temperature, humidity, CO<sub>2</sub> and O<sub>2</sub> to the culture environment. Transport your cultures between workstations or to other equipment while maintaining a consistent precision environment during transportation with the CondoCell.



BAKER RUSKINN

## Anaerobic Workstation – BugBox

*Compact Anaerobic & Microaerophilic Workstation*

BugBox anaerobic workstations are designed to help microbiologists cope with rising workloads and provide the best primary isolation rates. Plates can be examined easily without exposing them to oxygen. The interlock system allows simple and fast transfer of 90mm plates, and required equipment into the anaerobic chamber, while having a compact size to conserve valuable bench space.



BAKER RUSKINN

## Hypoxia Chamber – PhO<sub>2</sub>x Box

*Cell Culture Chamber*

Expand the experimental capacity of your existing workstations and incubators with the PhO<sub>2</sub>x Box. The cell culture chamber can be placed on a lab bench or inside an incubator or workstation to create an independent, precision gas-controlled environment. PhO<sub>2</sub>x Box is the easy to use and economical solution to O<sub>2</sub> and CO<sub>2</sub> controlled *in vitro* cell culture.



BAKER RUSKINN

## Anaerobic Incubator – Concept

*Systemized Anaerobic or Microaerophilic Incubation*

The Concept range has been rigorously tested to maximize productivity of systemized anaerobic or microaerophilic incubation; bringing together a host of features that you can trust, bringing immediate benefits to your busy laboratory. The modular-design, and suite of optional accessories provides users with true flexibility to expand and upgrade workspaces. It is by getting the small things right that sets this range apart. We know just how crucial it is for your equipment to support your team, to deliver effectively and efficiently every day.



## Physoxic/Hypoxic Chamber – OxyGenie

*Continuous Physoxic/Hypoxic Environment for Cells*

OxyGenie is a low-oxygen culture system for animal, plant, and bacterial studies. A miniaturized incubation platform, OxyGenie brings researchers a small, portable, and continuous physoxic (hypoxic) environment for short-term physiological oxygen and temperature-based studies.



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## Incubator – ReCO<sub>2</sub>ver

*Rapid Recovery Incubator*

The ReCO<sub>2</sub>ver rapid recovery incubator has been designed to provide precision control over the environmental conditions your cells require to thrive while delivering unprecedented recovery over those conditions after they have been interrupted. Vertical downward airflow with full-face HEPA (ISO Class 2) filtration works in concert with a superior ultrasonic humidity system to deliver maximum protection for your cultures with absolute precision.



BAKER RUSKINN

## In Vivo Oxygen Control Chambers – VeLO<sub>2</sub>x

*Rapid Oxygen Control Chambers for Mice, Rats and Small Animal Models*

Ideal for rat and mouse models, the VeLO<sub>2</sub>x system was created to provide controlled and isolated environments. By simulating the conditions experienced within a diseased state, VeLO<sub>2</sub>x allows researchers to better understand the impact that O<sub>2</sub> levels have across various conditions. Create custom dynamic and rapidly changing O<sub>2</sub> conditions with the help of the VeLO<sub>2</sub>x's ICONIC Gas Mixer.



BAKER RUSKINN

## Hypoxia Chamber – InvivO<sub>2</sub>

*Physiological Cell Culture Workstation*

The InvivO<sub>2</sub> workstation is packed with new, innovative features that allow you to study even the most complex cell interactions under perfect physiological oxygen conditions. Easy to use and adaptable to meet your needs, especially for cell culture applications that require carefully controlled oxygen regulation, InvivO<sub>2</sub> offers accurate and stable user-defined environmental controls, direct access to the inner chamber. Culture as nature intended, with InvivO<sub>2</sub>.







# Scintica:

*Linking scientists with the right precision tools*

*INFO@SCINTICA.COM*

*WWW.SCINTICA.COM*



## OFFICE LOCATIONS

### USA

#### **Scintica Inc.**

721 Tristar Dr,  
Webster, TX 77598

TEL: +1 (832) 548 0895

FAX: +1 (226) 884 5502

### CANADA

#### **Scintica Instrumentation Inc.**

562 Waterloo St., Upper Unit  
London, ON, N6B 2P9

TEL: +1 (519) 914 5495

FAX: +1 (226) 884 5502

### EUROPE

#### **Scintica Instrumentation Inc.**

The Netherlands

TEL: +31 43 808 00 14

FAX: +1 (226) 884 5502

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