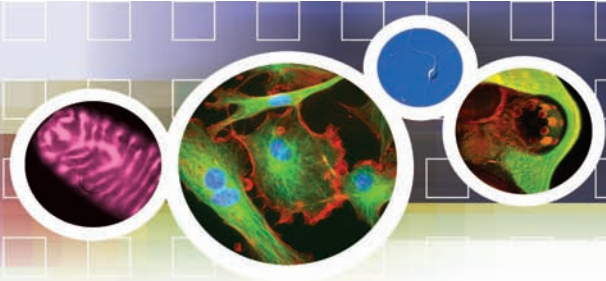


# DIGITAL PIXEL

## Biomedical Imaging & Microscopy



## Digital Pixel ...our Aims & Goals

Founded in 1994 as a University Spin Out Company, Digital Pixel's goal is to provide the very best in technology, systems and support for biomedical researchers who use optical microscopy in their field. We have gone a long way to achieve this - our systems are used by internationally renowned researchers across the world.

Our time lapse systems are recognised for their flexibility and reliability, and offer real performance levels supported by over 50 man years experience in this exciting and demanding area of technology. If it's the latest in stem cell microscopy, high speed cameras or simply for a feel of what we do, please read on. Feel free to contact us at any time about your microscopy application on 01273 502176.

### Environmental Chambers

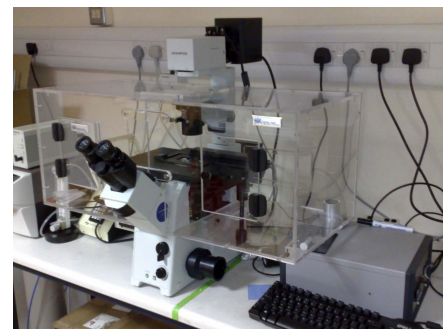
As part of our Live Cell 3.0 system we have developed a range of microscope environmental chambers. A powerful microprocessor system controls the temperature of the chamber to an accuracy of 0.1 °C.

The heater unit is manufactured using long life components. CO<sub>2</sub> control is provided using an internal chamber and is designed to fit a range of industry standard XY stages. Systems have been installed in the field for over 5 years.



### Supported Microscopes

Digital Pixel support a wide range of inverted and upright microscopes. We also support environmental chambers for number of confocal microscopes. These include Leica SP5, Zeiss 510, and Zeiss 710 microscopes.



### Ordering Information

Olympus IX 71/ IX 81

DP\_CHAMBER\_OL\_71

Nikon TE2000

DP\_CHAMBER\_NI\_TE

Nikon TI

DP\_CHAMBER\_NI\_TI

Zeiss 200M

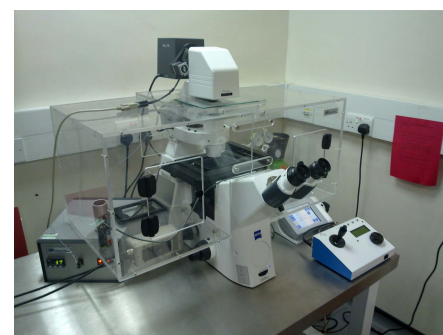
DP\_CHAMBER\_ZE\_200M

Zeiss Axio Observer

DP\_CHAMBER\_ZE\_OBS

Leica 6000I

DP\_CHAMBER\_LE\_6000I



On request we can provide a quotation for other microscope systems.

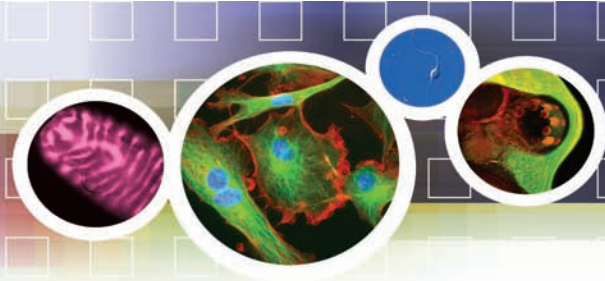
### Inside...

High Speed  
Hamamatsu  
9100 series

Stem Cell  
Microscopy

Colour  
Camera  
Systems

Environmental  
Chambers

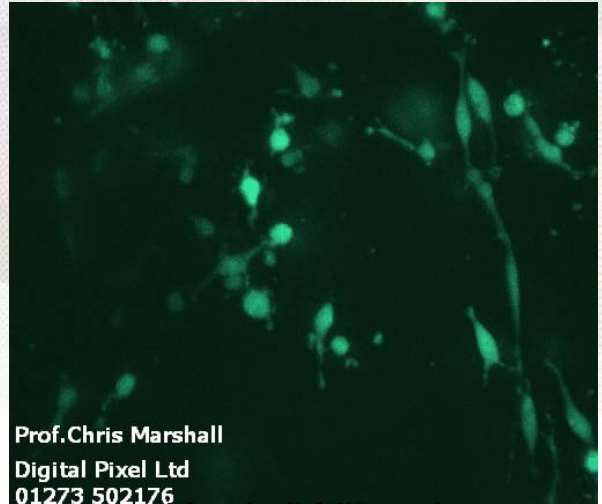


## Cancer studies

**Professor Chris Marshall FRS.  
Chester Beatty Laboratories London.**

Research Area: Signal Transduction Pathways,  
GTPases and Cell Cycle Control.

The Oncogene Team studies the roles of cell signalling pathways in cancer. A major focus is the function of the Ras and Rho families of small GTPases. A particular focus in our current studies is the mechanisms of tumour cell movement underpinning invasion and metastasis of cancer cells. We have found that as well as a previously described Rac driven lamellipodial form of cell movement, there is an alternative mode of cell movement that unlike Rac driven protrusive movement is absolutely dependent on Rho signalling to Rho kinase.



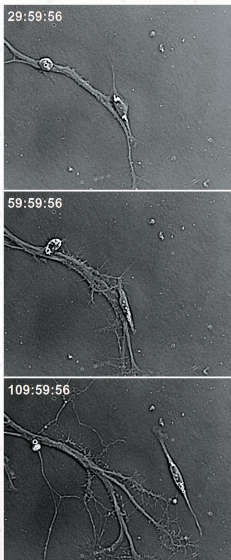
Prof. Chris Marshall  
Digital Pixel Ltd  
01273 502176

## Application Corner Stem Cell Lineage and Differentiation

With systems installed since 2001, it is fair to say that the Stem Cell Group at UCL have put our systems to the ultimate test.

The group had an inverted Leica that they wanted to upgrade to run time lapse studies. Digital Pixel then highlighted the development of multiple site time lapse technology that was being used by a group at UCSF in and incubator onto the Leica.

In 2003 a second system was installed onto an Olympus IMT-2. Showing that elderly microscopes can be upgraded and can still do an excellent job.



## Our Partners

Hamamatsu - High performance cameras for microscopy  
Chroma - Filters for fluorescence microscopy

**HAMAMATSU**



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