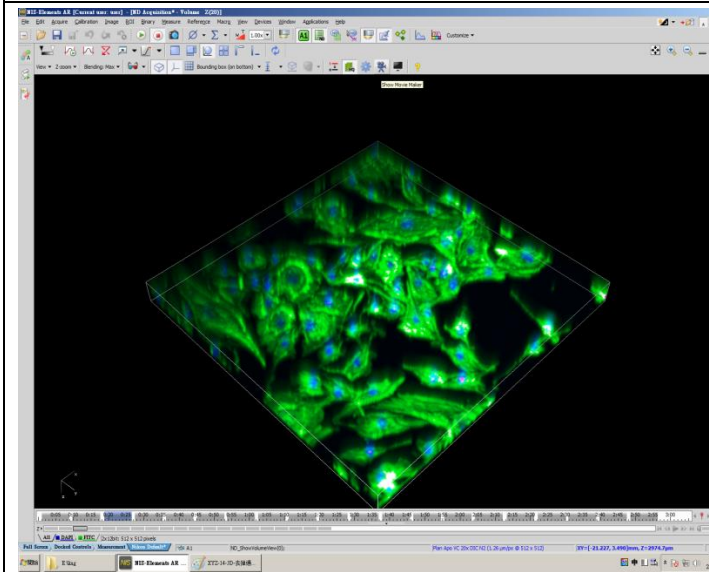
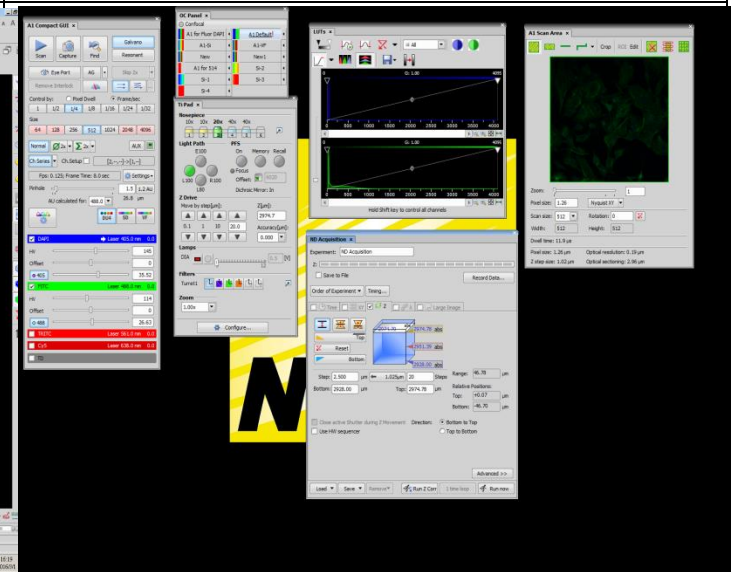

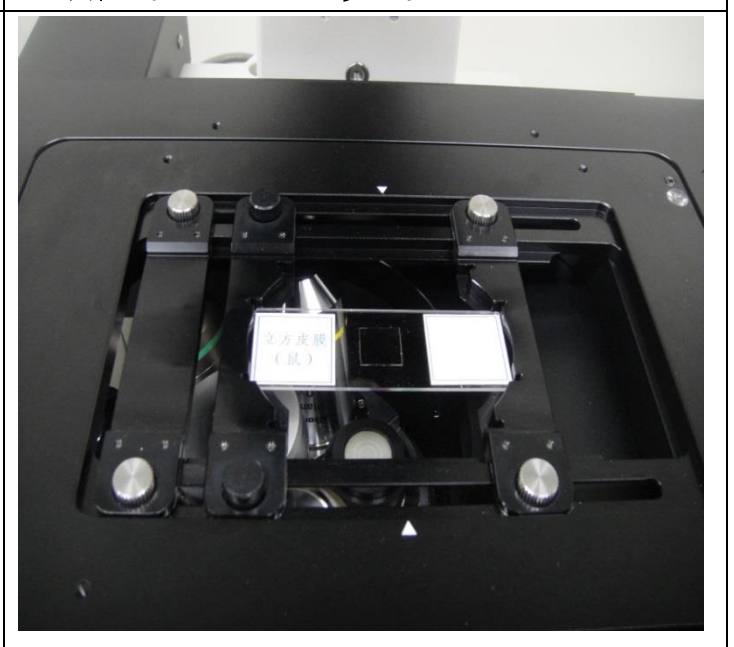


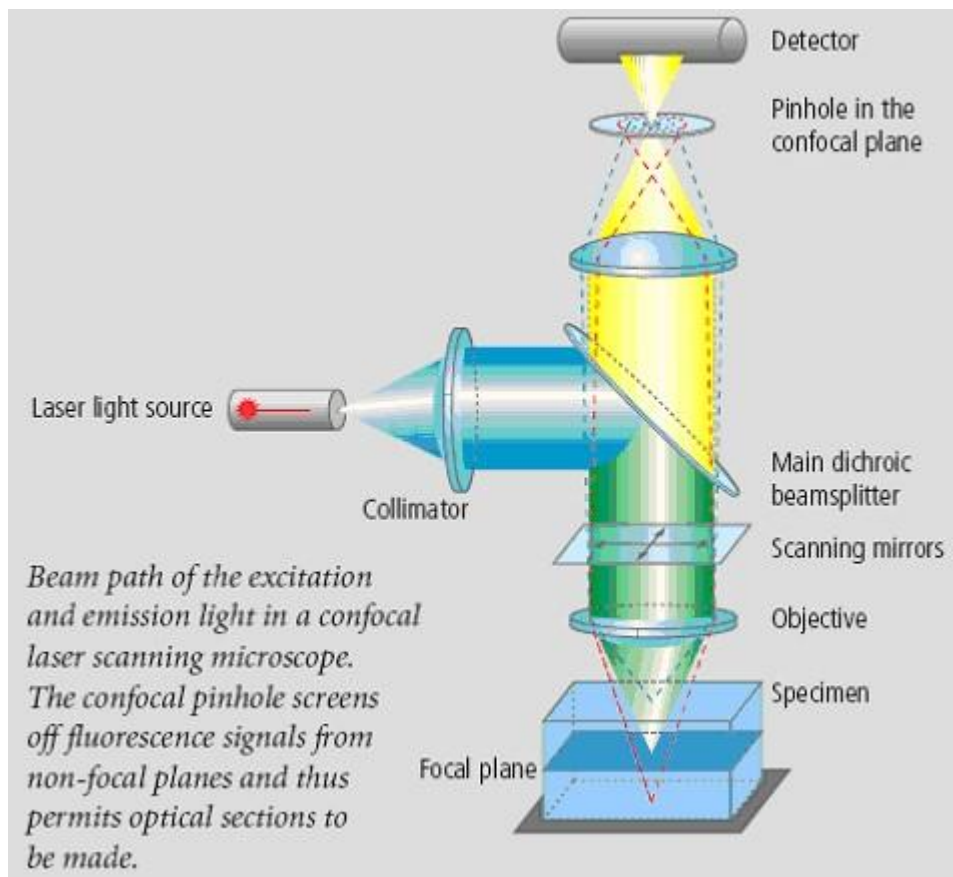
中原大學 薄膜中心 儀器簡介 - 2. Confocal A1R

儀器編號 : 2	功能
<p>中英文名稱 雷射共軛聚焦顯微鏡 Confocal Laser Microscope System, CLSM</p> <p>廠牌/型號 Nikon / A1R</p> <p>1. 配置的光源有 3 種 : 鹵素燈 汞燈 雷射 2. 雷射波段: #405 #488 #561 #635</p>	<p>1. 擷取影像有 2D 3D 4D(XYZT)</p> <p>2. 接收訊號的方式: 1. 螢光 CCD</p> <p>3. 雷射: DU4(濾片式) Spectrum(32 channel)</p> <p>4. 使用 Incubator 可觀察活體</p> <p>5. Hybrid Scanner : i. Resonant (420frames/s) Galvo(4096*4096pixsls)</p> <p>6. 物鏡種類有: APO Fluorescence Phase</p> <p>7. 物鏡倍率: 10× 20× 40× 60× 100×</p>

<p>圖例-1</p> 	<p>圖例-2</p> 
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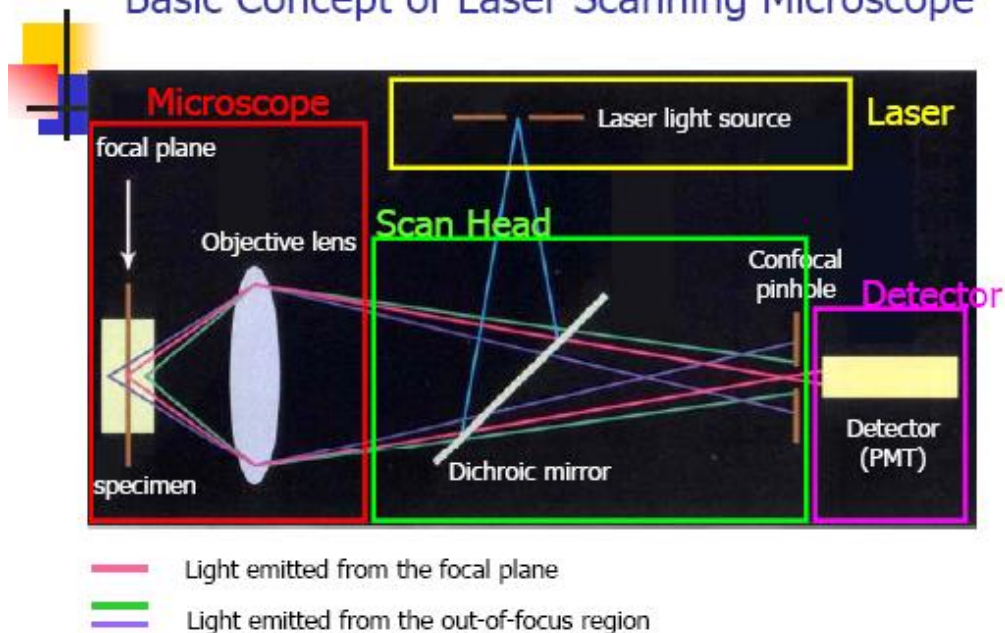
<p>儀器含顯微鏡 雷射 scanner 防震桌 incubatter</p>	<p>玻片樣品置放，也可放多孔盤。</p>
	

共軛焦顯微鏡的基本功能為提升傳統螢光顯微影像之品質。其成像原理乃以雷射光取代傳統螢光顯微鏡之汞燈，經由掃描器(Scanner mirrors)的導引，以點接點(Point by point)依序構面的方式，對螢光樣本進行激發(Excitation)與發散(Emission)訊息的擷取。所得之螢光訊息，利用成像共焦面(Confocal plane)處的一小孔(Pinhole)，阻擋非焦面的螢光雜光進入感測器(Detector)中，解決傳統螢光顯微鏡在非焦面雜光干擾下的模糊光蔽，產生螢光澄清化的光學切片效果，提升螢光顯微影像品質。



(圖文出處：中央國家科學研究院)

Basic Concept of Laser Scanning Microscope

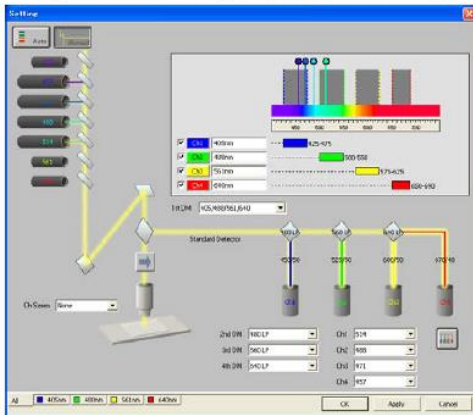


(圖文出處：Nikon)

Nikon A1R 之操作與分析

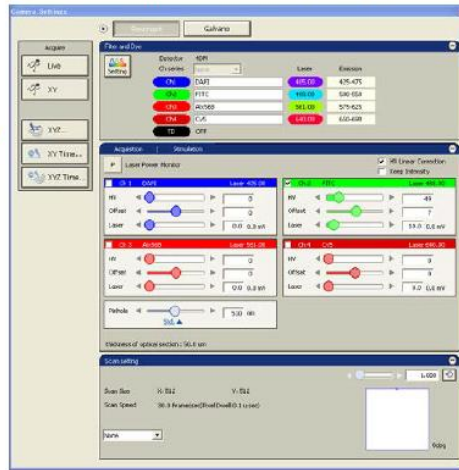
GUI for operation

Optical configuration setting

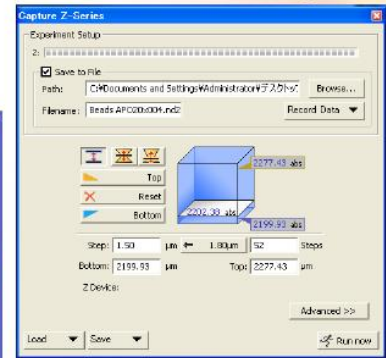


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Acquisition setting



Z series setting

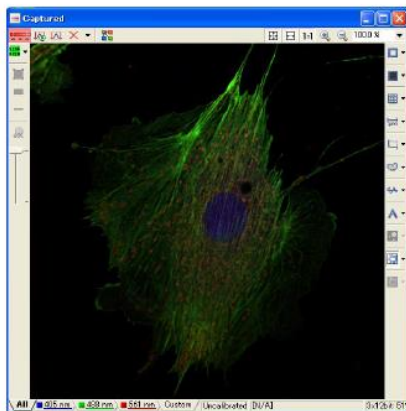


Bring Imaging to Life.



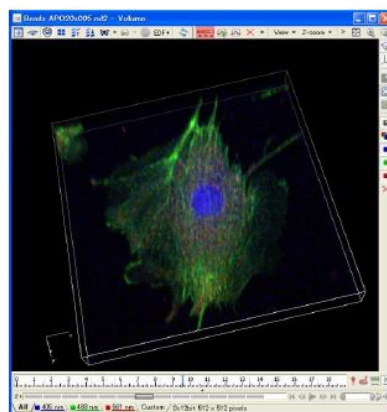
Acquisition & Analysis

2D

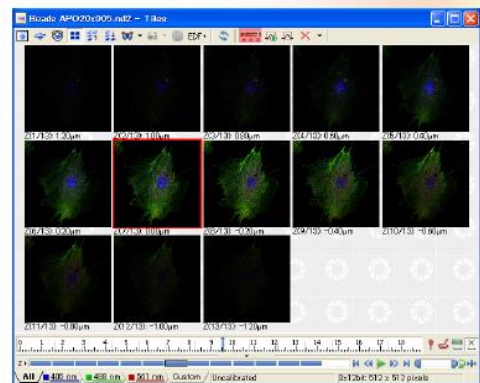


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3D volume



Tiling

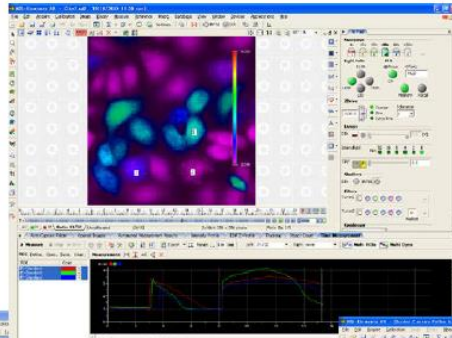


Bring Imaging to Life.

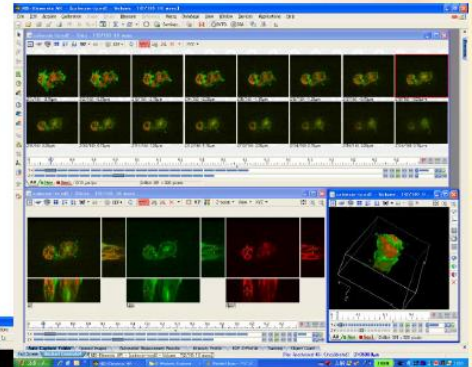


Acquisition & Analysis

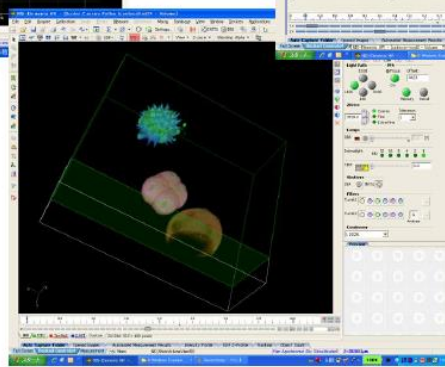
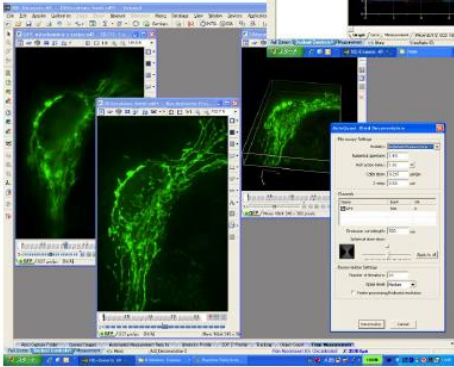
Ratio



Multi dimension



Deconvolution



Volume lender

Bring Imaging to Life.

