荧光显微镜

操作：

1. 打开电源开关（如果需要用荧光功能，请打开汞灯，并预热 5 分钟）。
   警告：开汞灯后必须满 30 分钟后才可以关灯。关灯后必须等 30 分钟后才可以再次开灯。

2. 打开 LASV4.5 软件。会出现如下四项界面显示：
   2.1（setup）选择组成部分。此界面用于工程师校准机器用。
   2.2（acquire）用于拍照。选择（camera）后点击（expuore adjust），用于 调整光明暗度，饱和度和伽马矫正。（calibration setting）用于插入尺子指示细胞大小。点击（acquire）键，进行拍摄照片。
   2.3（browse）用于浏览拍摄的图片和历史图片
   警告：请勿于此界面创建或更改文件夹路径，会导致文件丢失。
   2.4（process）用于照片的修饰。

保存和删除图片

1. 首先，在桌面创建自己的文件夹。
2. 选择你自己的文件，在(acquire)界面向照片点击鼠标右键。选（export），然后在（select export）里找出自己创建的文件，点击 OK 确定。
3. 如需删除图片，在桌面文件夹选择需要删除的图片，并自行删除。

功能

4 种波段的波长下有不同的功能：

(A) ：340 - 380 nm 用于细胞凋亡实验 （荧光功能）
（N2.1）：515 - 560 nm 用于细胞钙离子含量观测 （荧光功能）
（I3） ：450 - 490 nm 用于细胞膜电位测定 （荧光功能）
（BF） : 可见光波段 用于正常显微镜使用。

Fluorescence microscope

Operation:

1. Switch on the main power (For the additional Fluorescence function, turn on the mercury lamp and wait 5mins for warn up) .
   Caution: If you want to shut down the mercury lamp, it is necessary to wait 30min after you switch on the lamp. If you want to switch on the lamp again, it is also necessary to wait another 30min. Then you can turn the lamp on again.

2. Double click LASV4.5 software. After that, there will be 4 options can be selected.
   2.1 (**setup**): For components selection. Mostly for the calibration of the engineer
   2.2 (**acquire**): For photo taking → Choose (**camera**) → (**exposure adjust**) is used to calibrate the Brightness, Saturation and Gamma calibration. (**calibration setting**) is used to insert a ruler to indicate the size of cells. If you want to take photo, click (**acquire**) at the right hand bottom of the screen.
   2.3 (**browse**): For finding out the photo you take and history as recording functions.
   Warning: there is no file creating or changing allowed in the (browse) option because it will cause disappearance or lose of file.
   2.4 (**process**): For modifying photo and make the photo more specific.

Save or Delete the photo

1. Firstly, create your own file on the desktop. Never ever do this procedure in the (Browse) option.
2. Select your photo and press the right click your photo in (**acquire**) option. Then, choose the (**export**) option and find out the file you create in (**select export**). After that, click (**OK**).
3. For deleting photo, select the photo and press the delete button on the keyboard.

Function

There are 4 different regions of wavelengths:

(A): 340 -- 380nm can be used for apoptosis determination under the Fluorescence
(N2.1): 515 – 560 nm can be used for cellular calcium determination
(13): 450 – 490nm can be used for mitochondrial membrane potential determination
(BF): visible light can be used as a normal microscope