

A fluorescence microscopy image showing a network of neurons. The cell bodies and processes are stained in bright yellow and orange, set against a dark blue background. The neurons are interconnected, forming a complex web.

What kind of coverslips and  
sample mounting can I use?

The logo for King's College London, featuring the text "KING'S College LONDON" in white serif font on a red square background. The word "College" is in a smaller, italicized font. Below "LONDON" are two horizontal white lines.

KING'S  
*College*  
LONDON

The logo for the Wohl Cellular Imaging Centre, featuring a white rectangular box with a background image of neurons. The text "Wohl Cellular Imaging Centre" is written in a black serif font across the center of the box.

Wohl Cellular  
Imaging Centre



Most Lenses are  
designed to work with  
coverslips



Coverslip #	Thickness
0	0.085 - 0.13 mm
1	0.13 - 0.16 mm
1.5	0.16 - 0.19 mm
1.5H	0.17 - 0.18 mm
2	0.19 - 0.23 mm
3	0.25 - 0.35 mm
4	0.43 - 0.64 mm

*DIN ISO 8255 standard*

Coverslips can be of  
different thickness

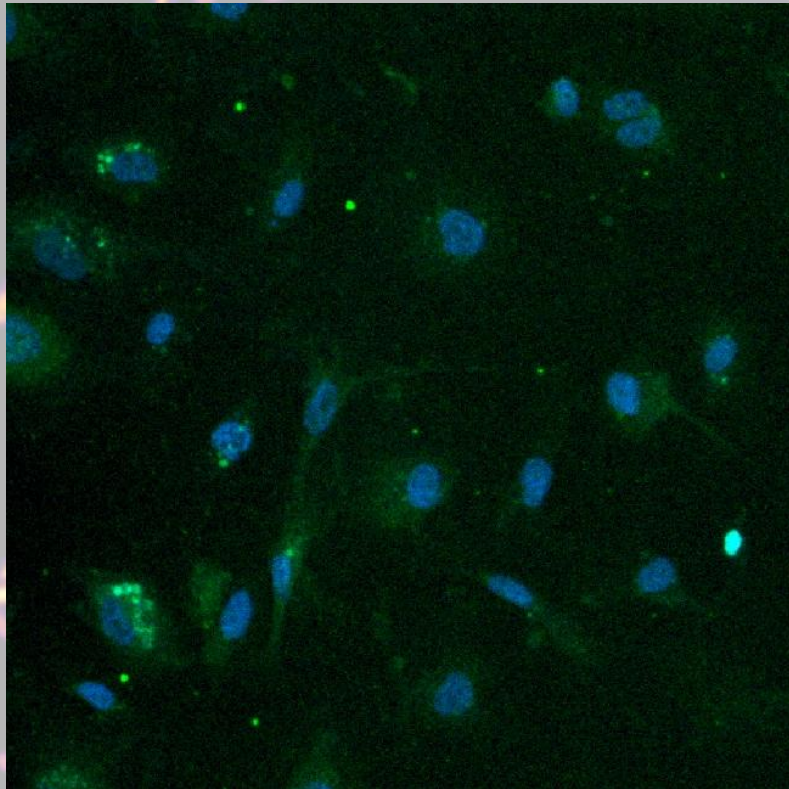
A fluorescence microscopy image of neurons, showing bright orange and yellow branching structures against a dark blue background. A white table with a black border is overlaid on the left side of the image. The table has two columns: 'Coverslip #' and 'Thickness'. Below the table, the text 'DIN ISO 8255 standard' is written in a smaller font.

Coverslip #	Thickness
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*DIN ISO 8255 standard*

You should use #1.5 or  
#1.5H (better) in WCIC  
and most “high-end”  
microscopes

# Using the wrong thickness will potentially ruin your imaging or worse lead you to make incorrect assertions based on your data



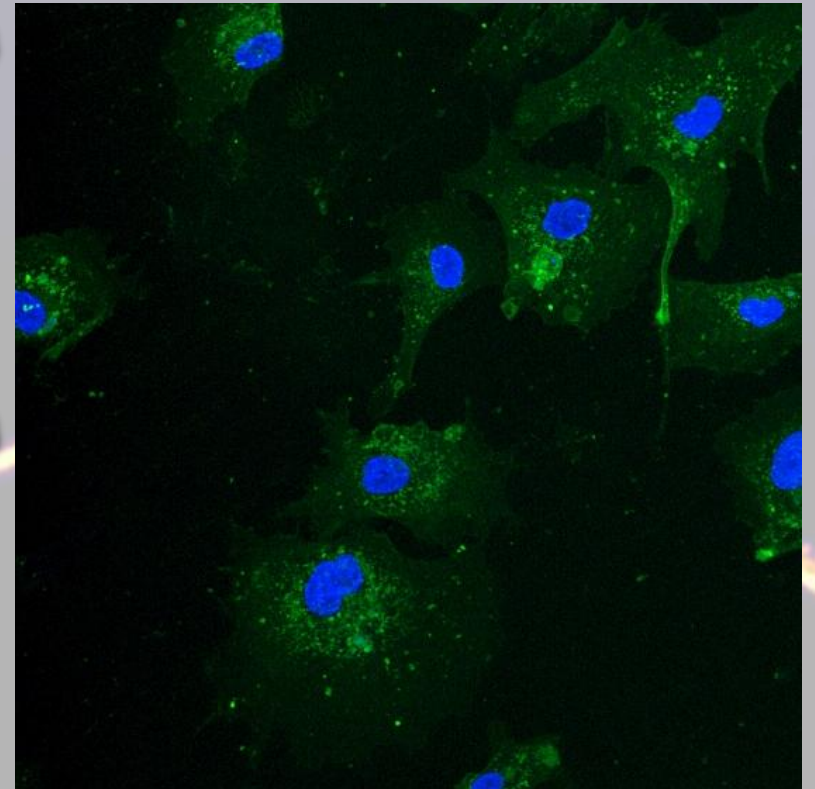
These are the same cells

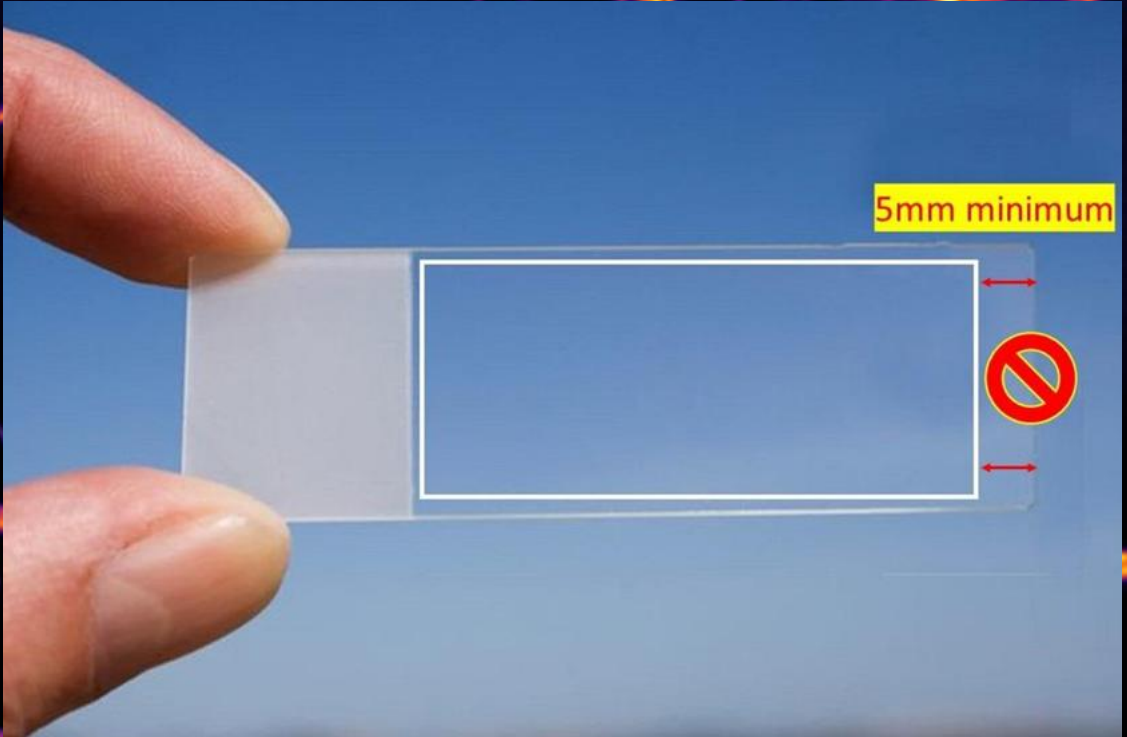
Using #1.5 →

← Using #0

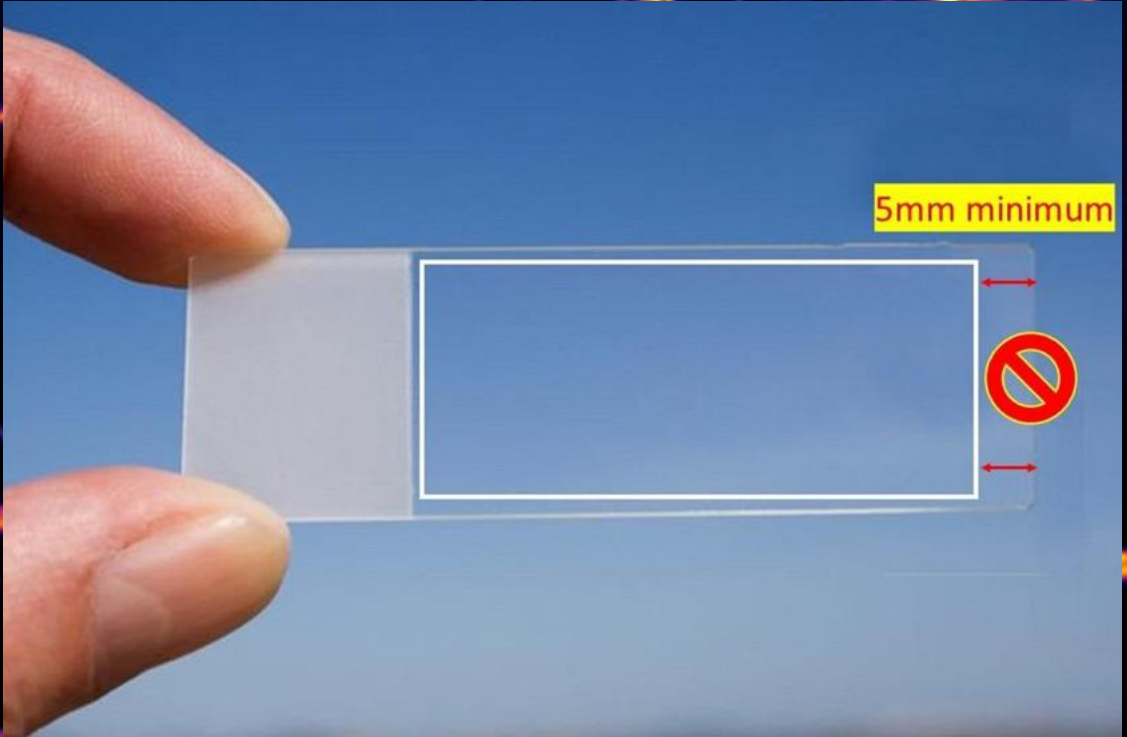
Much more illumination

was required for ←





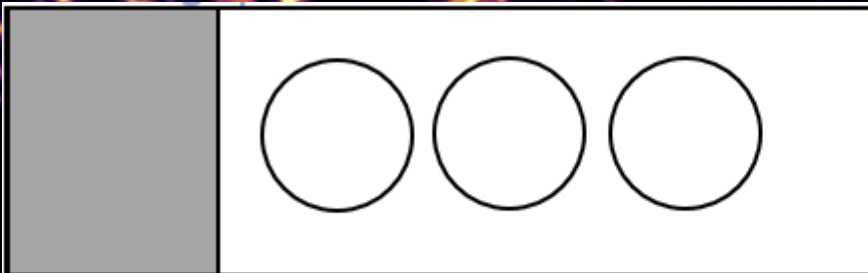
Space must be left so that your coverslip doesn't sit on the stage



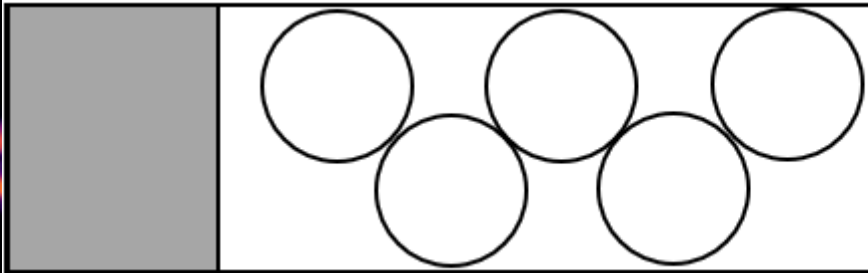
So you don't bring lenses in to the side of the stage



So you don't bring  
objective lenses in to  
the side of the stage  
and damage them



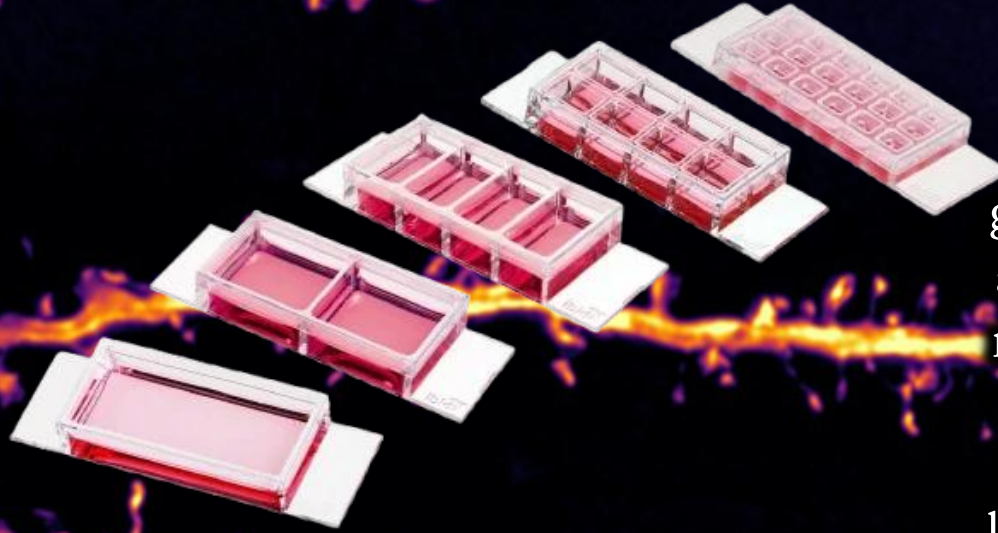
this is ok



This would be a problem

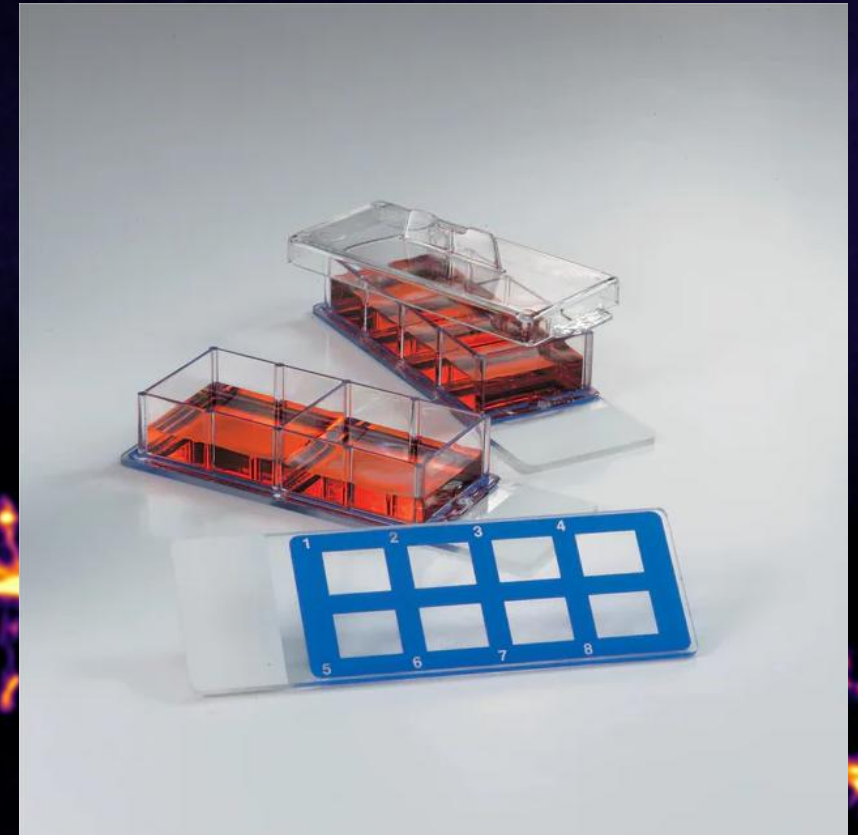
Keep things  
tidy and leave  
some space

# Chambered Coverslip vs Chamber Slides



These are not for imaging live cells → These will have 1mm glass slide between cells and lens until fixed and mounted with coverslip

← These are great for live cell imaging & have coverslip bases for this purpose.



# Multiwell plates and microscopy



Some multiwell plates are designed for microscopy imaging

## Multiwell plates and microscopy



Some may have thick polystyrene bases that will create a lot of background fluorescence and not let you use most lenses