

Quick Knowledge PART 2

WHAT TYPES OF RESCAN CONFOCAL MICROSCOPES ARE THERE?



There are 2 types of *REscan* Confocal units

Point *REscan*



RCM2.5

RCM2

RCM1

Line *REscan*

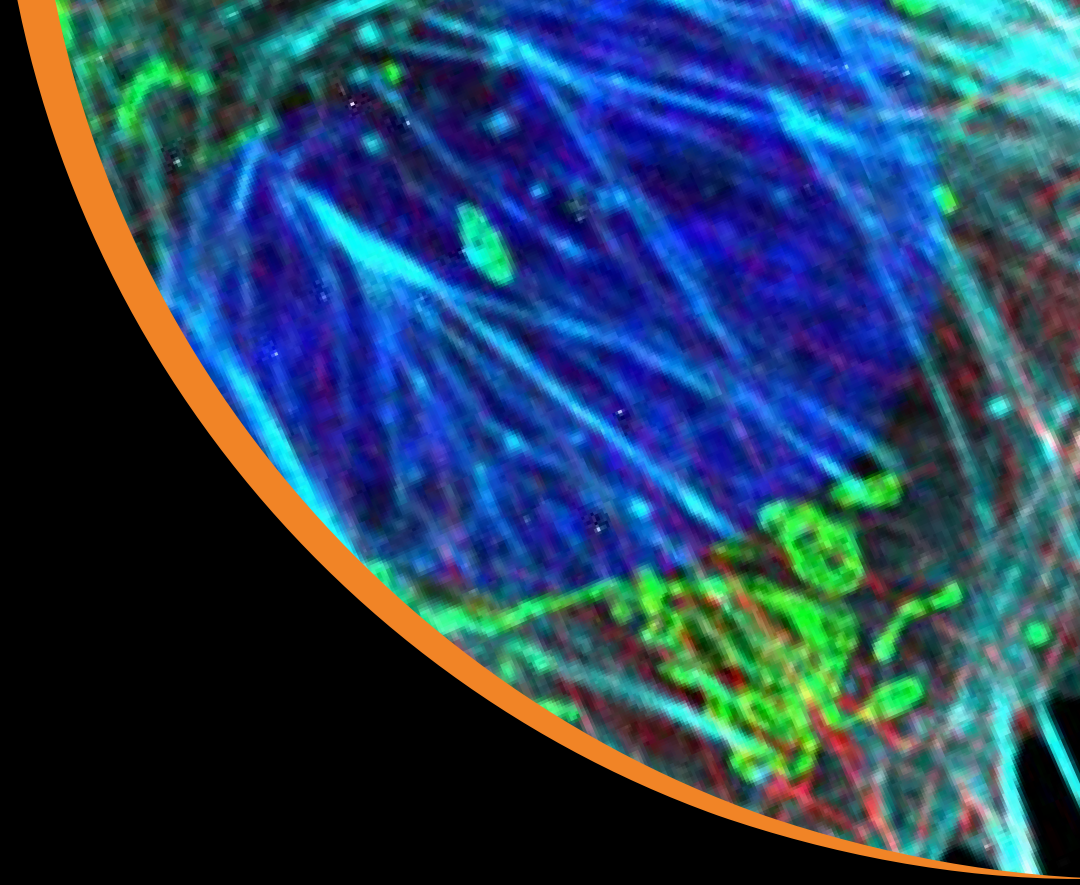


NL5+

NL5



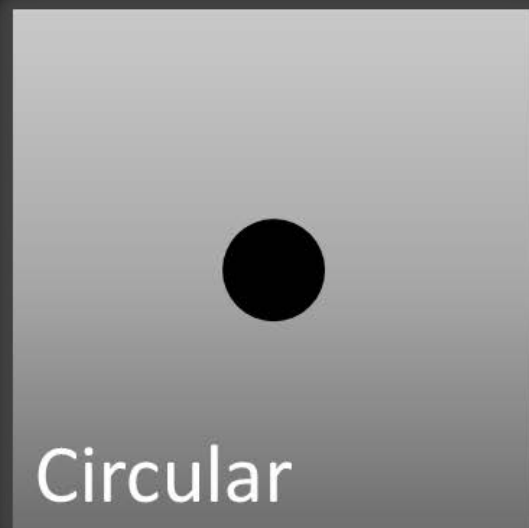
The difference between *REscans*



Point *REscan*

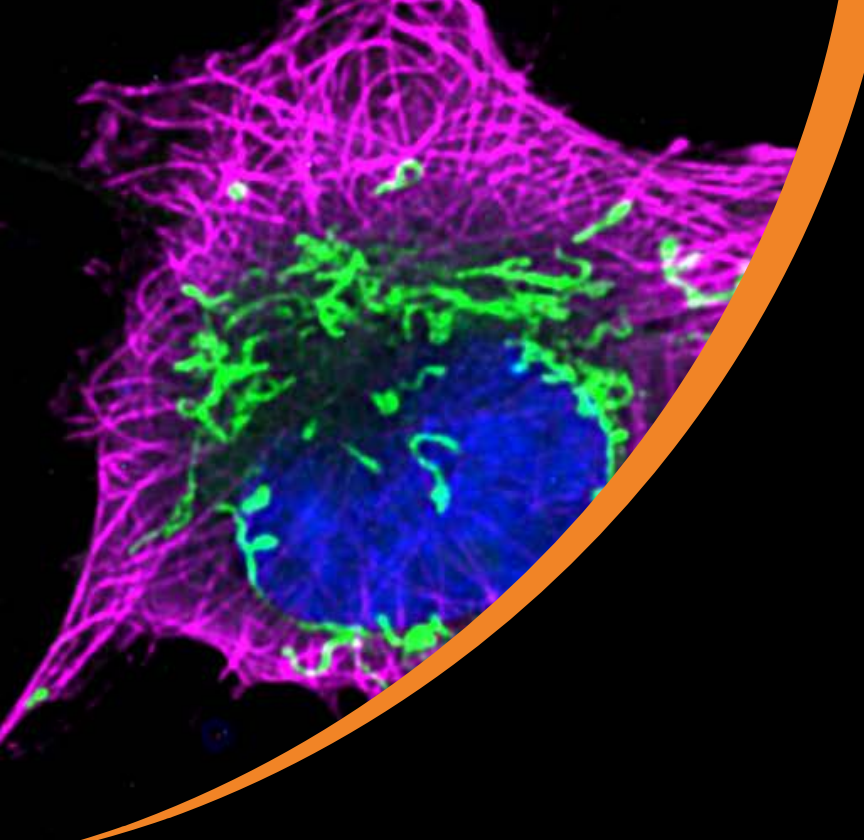
Line *REscan*

Pinhole



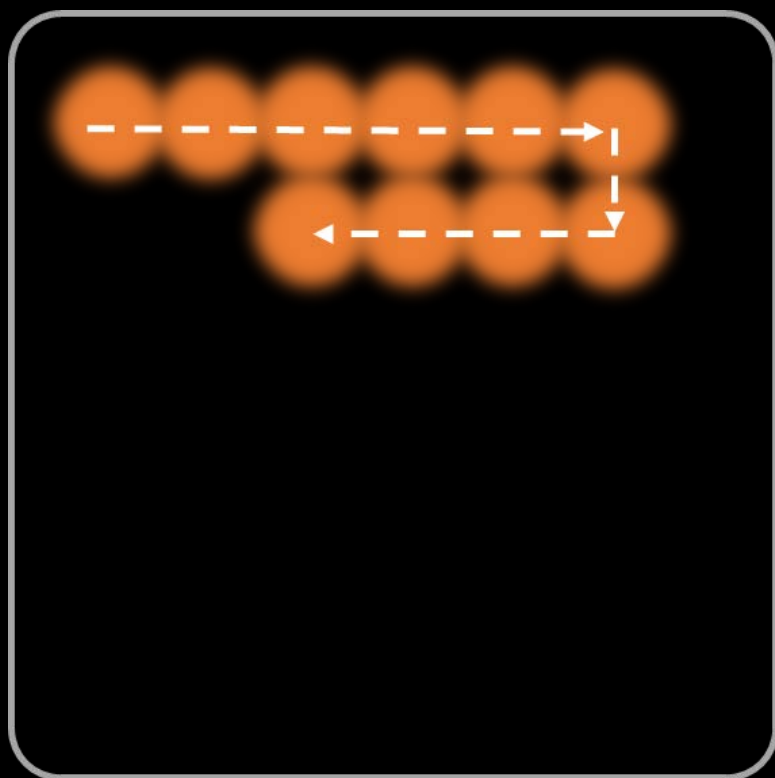
Illumination





Different *REscans*, different benefits

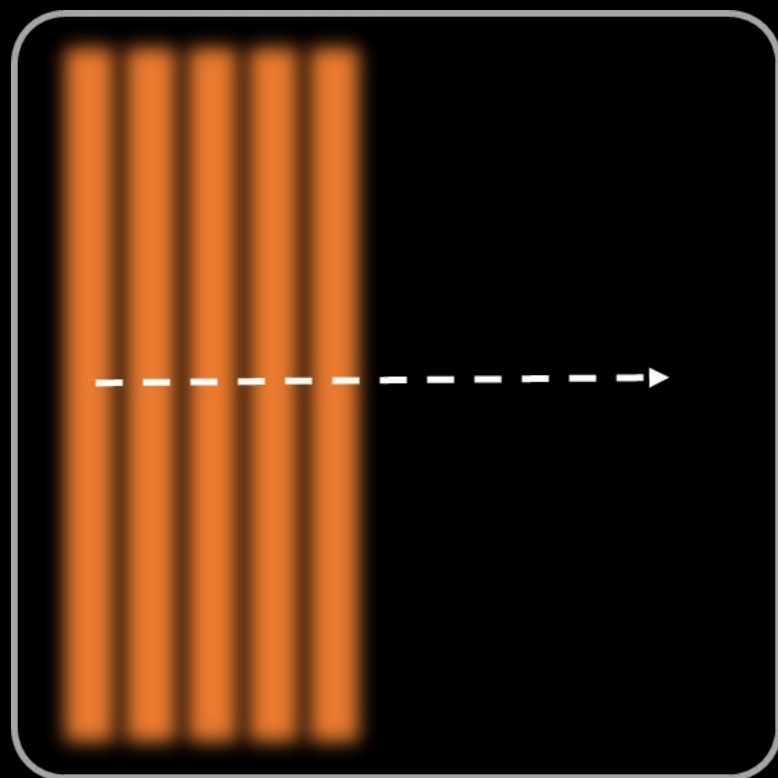
Point *REscan*



Breaking the diffraction limit

Live cell super resolution (**120nm**)

Line *REscan*



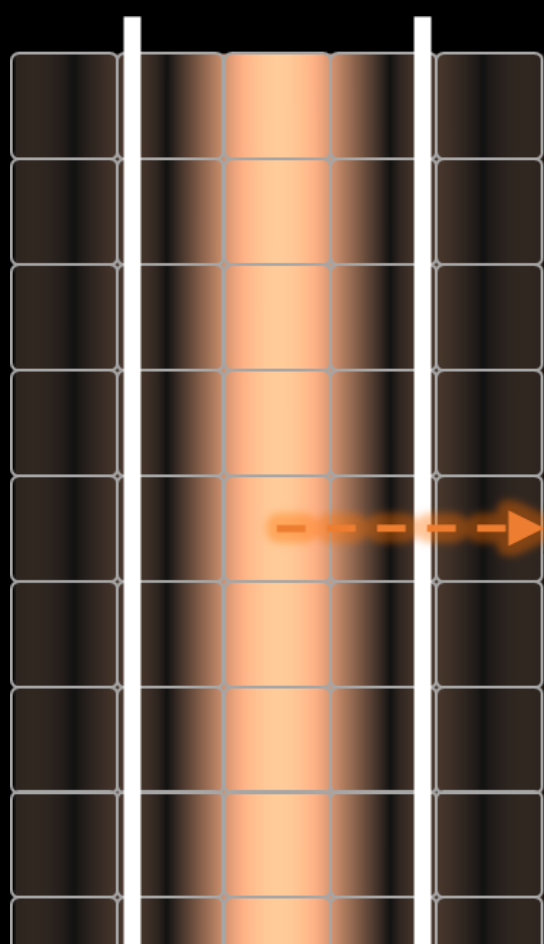
Diffraction limited at high speeds

Live cell imaging up to **75fps**



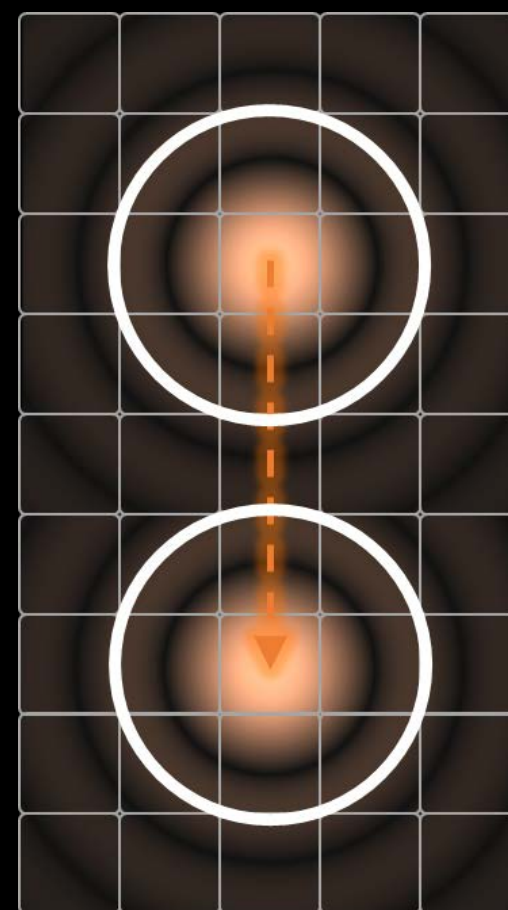
Is resolution the same in X and Y when using a slit?

Line *REscan*



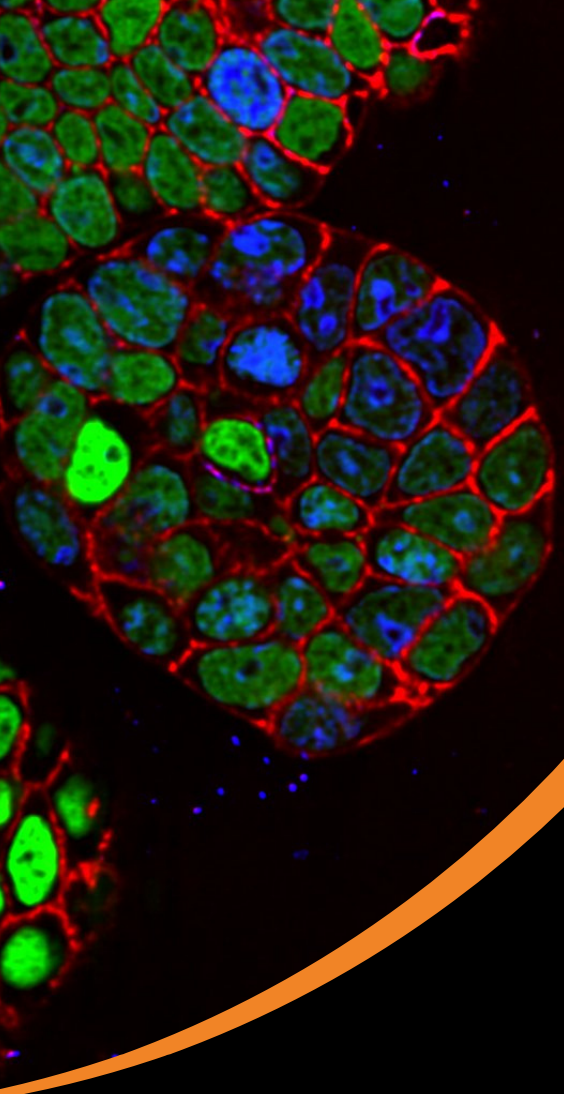
The slit is basically a small pinhole along one axis and a wide open pinhole along the other axis.

Point *REscan*



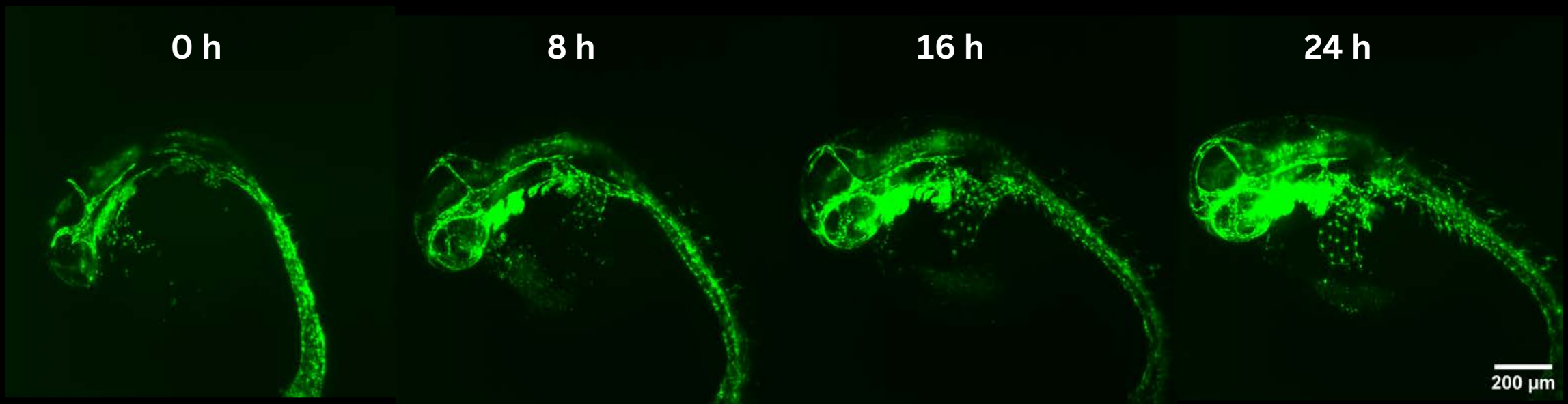
In all *REscans*, pinhole size has no influence on the XY resolution, because the **detector is pixelated** (see *PART 1*).





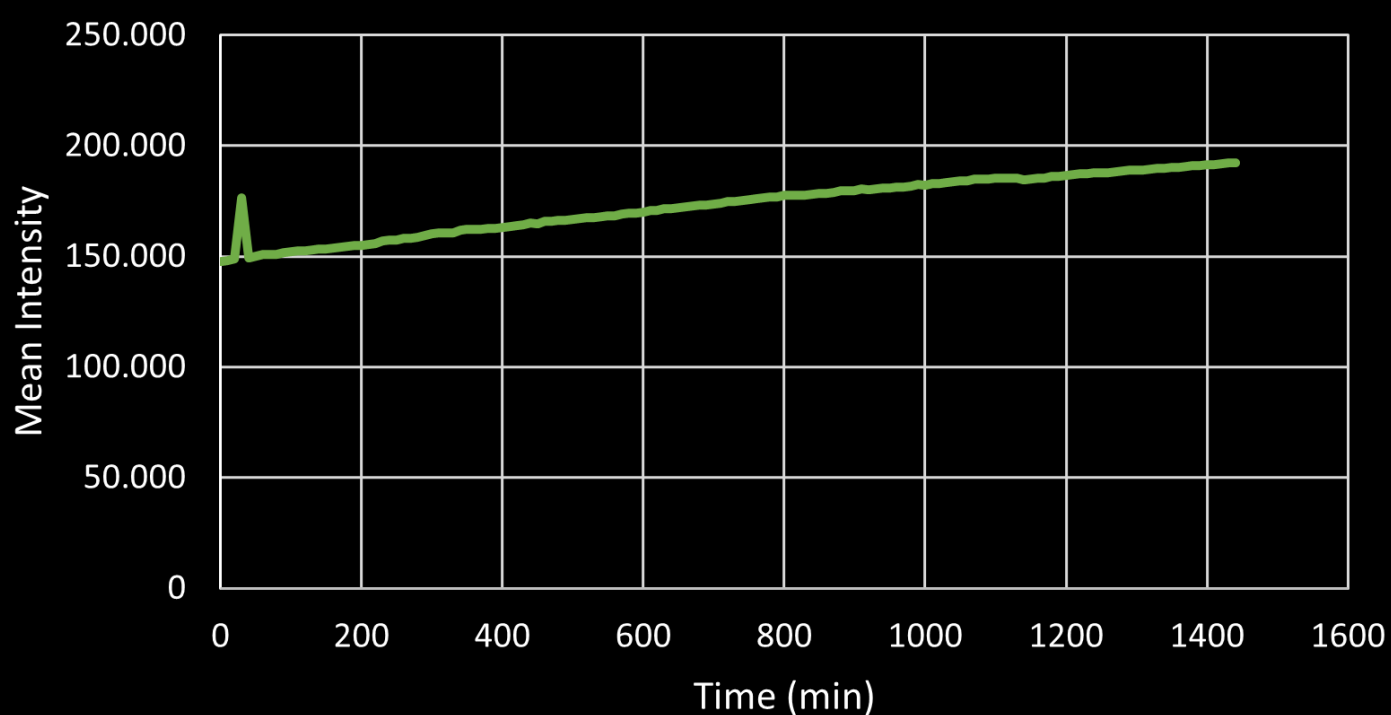
Low Phototoxicity of *REscan* Confocal

Compared to standard confocals...



Growing zebrafish

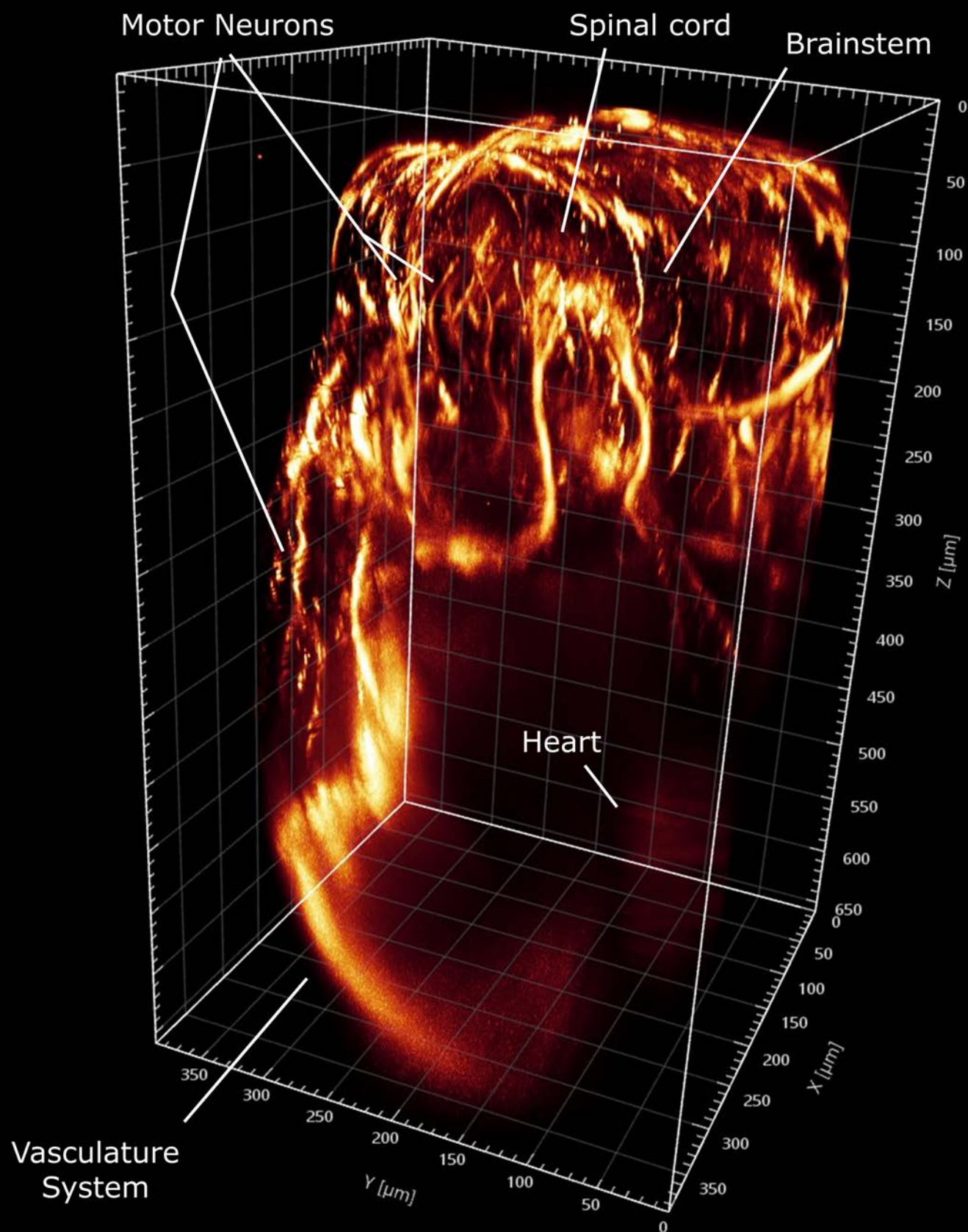
Fluorescence Intensity of endogenous GFP



***REscan* needs
way less
illumination...
making *REscan*
more cell
friendly!**



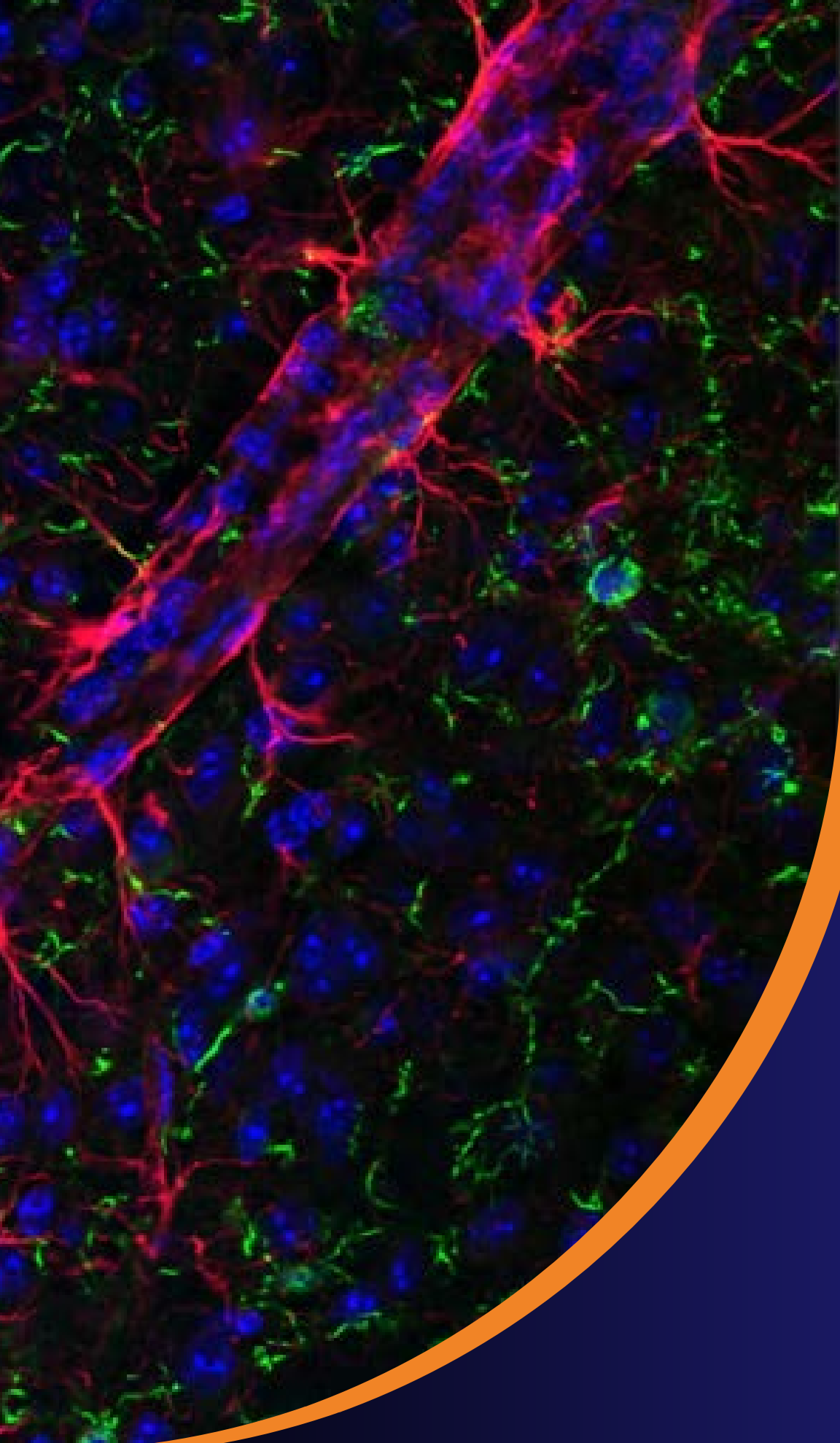
Deep imaging with *REscan* Confocal



Zebrafish

Less illumination means less bleaching of out of focus cells when going up to **650 μm in depth.**





Find out more at

www.confocal.nl.com

*Want to find out how **REscan** compares to other confocal systems, especially in deep and live cell imaging? Check PART 3!*



Confocal.nl

