

## Democratizing Confocal Microscopy: A Fast Benchtop Microscope to Boost Productivity.

G. Wilde<sup>1</sup>, C. Florindo<sup>1</sup>

<sup>1</sup> Andor, An Oxford Instruments Company.

### Abstract

Andor bench top confocal BC43 is a full high-speed confocal in less than a 60cm cube with all that is required such as objectives, lasers, filters, etc. It can be a space-saving workhorse for a facility or sit on a bench alongside your centrifuge, delivering outstanding images within a wet laboratory's workflow.

With 3 imaging modalities (confocal, widefield and transmitted light), 10 imaging channels, 4 lasers, a motorized stage and 6D acquisition options, the user has the flexibility to perform a vast amount of life science imaging applications, such as live imaging, multi-tile imaging, imaging thick samples, multiwell, etc. Importantly the software was carefully considered with ease of use as a goal; the result is that an undergrad student can learn how to use the system in less than 60 minutes.

Join us to see the BC43 in action. We will show our end-to-end confocal solution. We will start by presenting the BC43 and its imaging capabilities; following it with BC43-acquired data, we will present an AI-driven analysis of the data using Imaris software.

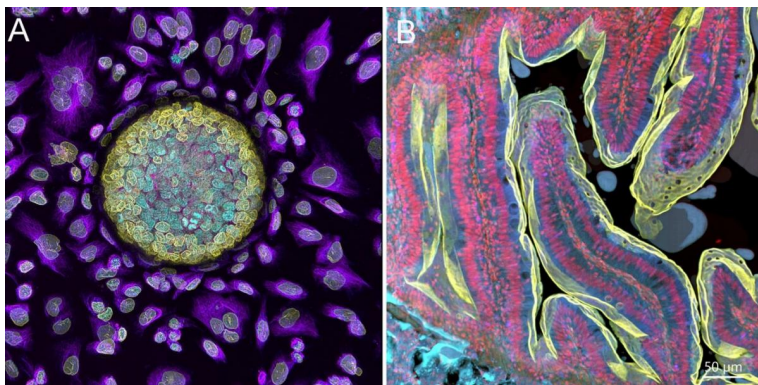


Figure legend:

A) Pancreatic ductal adenocarcinoma cells inside and on top of a 3D Hydrogel. (DNA in cyan, Lamin A/C is in Yellow and tubulin is magenta). Image courtesy of Dr Yu-Suk Choi, University of Western Australia.

B) Zebrafish intestine. The Image presented is an insert of a full intestine image composed of 4 imaging channels, 77 stacks and 28 tiles (a total of 15092 images). Image was acquired in 20 minutes. Sample courtesy of Julien Resseguier, at NorMic, University of Oslo.