

Dragonfly 600: Imaging from protein complexes to model organisms

C. Florindo¹, B. Combettes¹

¹ Andor, An Oxford Instruments Company.

Abstract

The Dragonfly 600 is a new high-speed confocal imaging platform that delivers matchless imaging capabilities across scales from nanometres to centimetres. The new features included are:

- 1) Andor's proprietary B-TIRF imaging modality, which delivers highly uniform TIRF imaging, is exceptionally easy to setup due to the optical feedback, and offers flexibility in its range to also image in HiLo;
- 2) A newly developed high-power laser engine (HLE) for super-resolution techniques and higher throughput imaging; and
- 3) The 3D super-resolution module combined with all imaging modalities (widefield, confocal and B-TIRF).

The Dragonfly spinning disk confocal is a complete multimodal system with outstanding versatility and exceptional performance in any scale, either Single-molecule imaging applications (SMLM), thick samples and live cell imaging.

In this workshop, we will present the Dragonfly 600, and the attendees will be able to see its key features live, such as:

- 1) SMLM paint imaging with Dragonfly 600 using DNA-PAINT samples.
- 2) B-TIRF imaging and its easy setup with the optical feedback
- 3) Imaging with confocal mode into deep thick samples while visualizing in 3D the imaging result.

Join us to understand how Dragonfly 600 can boost your research.

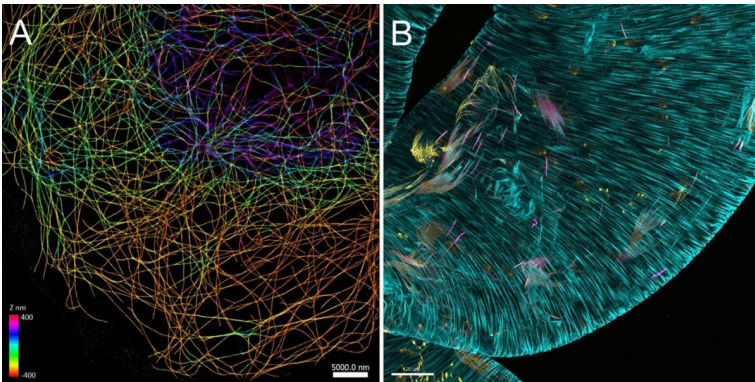


Figure legend:

A) DNA-Paint image of microtubules. This image was captured using Andor's patent-pending B-TIRF, and the 3D super-resolution module. The colour indicates Z position on the nm scale. Image courtesy of Felix Revera-Molina, Yale University.

B) Drosophila testis showing different stages of Sperm individualization (DNA in Yellow, protamine-GFP in magenta and actin in Cyan). Image courtesy of Ching-Ho Chang, Harmit Malik lab, Fred Hutchinson Cancer Research Center).