Central European Institute of Technology BRN0 | CZECH REPUBLIC

**CrEST** SPINNING DISK SYSTEM



# Cellular Imaging Core Facility





# Affordable High Speed spinning disk confocal system

#### Key specifications and features

- » Resolution: 100X Plan Apo Lambda 1.45 objective and 70  $\mu$ m pinhole: 250 nm lateral; 650 nm axial
- » Disk Speed: 15.000 rpm standard, 20.000 rpm version possible
- » Illumination: LED Spectra X (Lumencor) or CAIRN Laser unit
- » Single or dual pattern option, up to 22 mm FOV (single pattern)
- » Pattern pinhole size: 40 μm (for low NA objectives) and/or 70 μm (for high NA objectives). Custom size and pattern on request
- » Ease of use: NIS Elements driven interface. Easy pattern focusing
- » Objective compatibility: 100X, 60X, 40X
- » Possibility for: VCS hardware resolution enhancement or deconvolution software resolution enhancement with NIS Elements software

## Technology

- » CrEST spinning disk uses a proprietary NA dependent pinhole pattern for maximum confocality and higher S/N ratios
- » Single pattern (1 pinhole size, large FOV) or dual pattern (2 pinhole sizes, but smaller FOV)
- » Motorized widefield o confocal switchover while spinning
- » Easy Gimbal mount for quick alignment and best S/N
- » Continuous spiral pattern available for higher throughput
- » Motorized dichroic and emitter fil er wheels

### **CrEST confocal acquisition**

- » Triggered multicolor acquisition possible with NIDAQ triggering to the Spectra X illuminator
- » NIDAQ triggered Piezo Z-stacks possible at 1 Z-stack per sec
- » Scan speed freely adjustable by  $\Delta t$  exposure, binning and cropping
- » Enhance resolution with denoising and deconvolution software solution or with the VCS hardware and software solution



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**REGISTRATION DEADLINE 11/12/2016** 

