CMOS cameras, software, 10/17

October 2017—Spot Imaging introduced its Spot RT sCMOS, with Sony's Pregius CMOS sensor. The RT sCMOS is optimal for fluorescence microscopy, fluorescent in situ hybridization, green fluorescent protein (GFP) imaging, immunofluorescence, and 3-D deconvolution applications. Features include deep cooling, which allows dim images to be seen without becoming obscured by dark current; a global shutter, which ensures undistorted images of moving specimens; and 5 megapixel live and captured image resolution. The sCMOS is nine times more sensitive than the previous RT camera.

The company also introduced its Insight sCMOS camera, with the Pregius sensor. The USB 3.0 interface and global shutter work with the company's Spot software autoexposure scheme to produce distortion-free, live-image viewing of moving specimens at 22 frames per second, at full resolution. The combined low read noise and high quantum efficiency provide sensitivity not previously seen in uncooled cameras, according to the company.

The Spot 5.3 software adheres to the stringent standards Microsoft implemented to prevent malicious boot operations and comes with device drivers digitally signed by Diagnostic Instruments and Microsoft. All digital signatures use enhanced validation to ensure drivers and installers originated at Diagnostic Instruments, enabling use of the Secure Boot on Windows 10 systems, further protecting computer infrastructures from third-party exploitation.

Spot Imaging, 586-731-6000