



NEWS RELEASE

## Bruker Introduces Next-Generation Wide-Field, Multiphoton Microscope for Optogenetics

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New Ultima 2Pplus Delivers Most Advanced and Versatile 3D Photostimulation and Full-Field Imaging for Neurobiology

SAN DIEGO, Nov. 5, 2018 /PRNewswire/ -- At the 2018 Annual Meeting of the Society for Neuroscience, Bruker today announced the release of the **Ultima 2Pplus** next-generation multiphoton, all-optical stimulation and simultaneous imaging platform for neurobiology applications. The **Ultima 2Pplus** features the best commercially available combination of advanced photostimulation experiments, including holographic stimulation, combined with simultaneous wide-field, enhanced-sensitivity imaging. In addition, the new **Ultima 2Pplus** anticipates future techniques by offering longer wavelength 3-photon imaging (up to 1700 nm) for looking deep into living tissue. An extended clearance stage designed for large-animal imaging, and a fully corrected, decoupled electrically tunable lens (ETL) for simultaneous holographic stimulation and 3D imaging make the system uniquely suited for advanced neuroscience inquiry into awake animals.

"The neuroscience community has long desired microscopes that support both 3D, high-speed photoactivation and full-field, deep imaging," said Dr. Adam Packer of Oxford University. "Bruker's novel **Ultima 2Pplus** promises a single-tool solution, providing a new all-optical resource for quantitative investigation."

"The **Ultima 2Pplus** builds on over 15 years of leadership in instrument and application development for neuroscience," added Xiaomei Li, Ph.D., Vice President and General Manager for Bruker's Fluorescence Microscopy Business. "This new system makes a leap forward from conventional multiphoton performance to an almost ideal, all-optical, single-tool solution for both photoactivation and wide-field imaging."

About Ultima 2Pplus

The **Ultima 2Pplus** system builds on the platform design of Bruker's **Ultima Multiphoton Microscopes** to provide all the advantages of industry-leading photoactivation, with new advances in field of view, sensitivity, wavelength, and sample accommodation. The system's optimized optical train confers exceptional performance to the very edges of the wide field. The design also extends the 3-photon wavelength range to 1700 nm. Decades of laboratory experience and close collaboration with leading scientists around the world has led to a host of unique capabilities and features found only on Ultima systems. The **Ultima 2Pplus** delivers an ideal combination of flexibility, resolution, imaging depth and speed, allowing users to perform simultaneous imaging, stimulation and electrophysiology protocols with greater efficiency and effectivity.

### **About Bruker Corporation (NASDAQ: BRKR)**

Bruker is enabling scientists to make breakthrough discoveries and develop new applications that improve the quality of human life. Bruker's high-performance scientific instruments and high-value analytical and diagnostic solutions enable scientists to explore life and materials at molecular, cellular and microscopic levels. In close cooperation with our customers, Bruker is enabling innovation, improved productivity and customer success in life science molecular research, in applied and pharma applications, in microscopy and nanoanalysis, and in industrial applications, as well as in cell biology, preclinical imaging, clinical phenomics and proteomics research and clinical microbiology. For more information, please visit: [www.bruker.com](http://www.bruker.com).

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