

CytoViva Introduces Breakthrough Nano-Technology Research Tool

Thursday August 21, 4:22 pm ET

New Hyperspectral Imaging Technology Integrated with the Award Winning CytoViva Nano-scale Microscope

AUBURN, Ala., Aug. 21 /PRNewswire/ -- CytoViva Inc., a leading provider of optical imaging solutions to the nano-technology research market, has integrated new hyperspectral imaging technology (HSI) with its advanced nano-scale microscope system. This combination of technologies enables scientists to make significant advances in a wide range of nano-medicine and nano-materials research initiatives.

Over the past three years, the CytoViva Nano-scale Microscope System has been adopted by many of the leading nano-technology research centers. This includes world-class research hospitals such as Johns Hopkins School of Medicine and M.D. Anderson Cancer Center, as well as, government laboratories within the FDA, NASA and NIH. This technology has received wide acclaim, including two R&D 100 awards and a Nano50(TM) award.

Hyperspectral Imaging is a highly effective method for identifying the presence of materials and biologicals based on their unique "spectral signature." By incorporating HSI with the CytoViva Nano-scale Microscope System, scientists can quantitatively confirm the presence of specific nano-scale materials. HSI is unique in its ability to capture and report this spectral data within each individual pixel of an image.

A primary application for this technology includes research of nano-particles used as a targeted drug delivery vehicle for treating cancer. With the CytoViva system, scientists can observe these nano-particles as they are absorbed by the cancer cells and quantitatively confirm this process through identification of the particle's unique spectral signature.

According to Chuck Ludwig, CytoViva President, "The development of our hyperspectral imaging capability was driven by customer requirements to quantify images from their CytoViva microscope system. Now these scientists will be able to create spectral signatures of nano-scale materials as they interact with biological or polymeric composites. In addition HSI can often quantify the presence of materials not easily observed, even when using our advanced optical microscope system."

The CytoViva HSI technology has its origins over the past two decades within the Department of Defense. Primarily used in aerial reconnaissance, HSI has been used extensively by the military to identify camouflaged materials.

Further information may be obtained by calling CytoViva at (334) 737-3127 or by visiting the CytoViva web site at: www.cytoviva.com.

Contact:
Byron Cheatham
334.737.3127
byron.cheatham@cytoviva.com