

CARL ZEISS, GERMANY TEAMS UP WITH COLORADO MICRODISPLAY FOR NEUROSURGICAL "COCKPIT"

NEW TECHNOLOGY INCREASES SAFETY AND EFFICIENCY FOR NEUROSURGEONS

TORONTO, ON. - April 23, 2001 — Colorado MicroDisplay, a leading developer of high-resolution, full-color microdisplay solutions, announced today that it has been selected by Carl Zeiss, to provide microdisplays for use in Zeiss' OPMI® Neuro MultiVision. The MultiVision microscope is a breakthrough method for performing microsurgical procedures, as it merges the many different sources of diagnostic information used today in operating rooms. The Multivision microscope is being shown this week at the 2001 Annual Meeting of the American Association of Neurological Surgeons (AANS) in Toronto, April 23-25.

In modern neurosurgery, neurosurgeons rely on many sources of information to guide them, among the most important of which are: the surgical microscope, an endoscope (to "see around corners"), and computer generated navigational data. With CMD's microdisplay in the eyepiece of the OPMI® Neuro MultiVision System, a surgeon is provided all of the information needed without having to look away from the surgical microscope at other monitors, thereby creating a virtual "cockpit" for the surgeon. Using either a handgrip or a foot pedal, the surgeon can easily switch between the images from the microscope and the endoscope. Viewing the microscope image in conjunction with a microdisplay also allows navigational overlays and other data to be projected onto the microscope image, further improving the surgeon's efficiency and accuracy.

In the specific case of neurosurgery, the key problem is the need to safely and completely remove various types of tissues. Having these different viewpoints from the microscope and endoscope as well as navigational aids at the touch of a button increases the surgeon's overall effectiveness.

"Carl Zeiss is one of the world's leading developers of high performance optical products," said Jordan Watters, VP of Marketing and Sales of Colorado MicroDisplay. "The selection of the CMD microdisplay for use in Zeiss' precision environments such as neurosurgery and other microsurgical procedures is a great endorsement of our high image quality and video performance. We're very excited about this design win and partnership with Zeiss."

"CMD's microdisplay system provides crisp, beautiful images with outstanding contrast, color and brilliance and was the optimal solution we needed to consolidate the different images and views in the microscope that assist the surgeon. We believe this integrated surgical cockpit approach will improve efficiency and surgeon comfort by reducing the number of interruptions common today when dealing with the various diagnostic and intraoperative aids located around the O.R. Endoscopic Assisted Craniotomy especially will see a significant benefit from this tight integration into the surgical workflow," said Dirk Brunner, Business Unit Manager Neurosurgery, Spine & ENT of Carl Zeiss. "MultiVision allows us to simplify the whole process, bringing the surgeon considerably closer to the goal of more effective and more reliable endoscopic-assisted microsurgery."

CMD's microdisplays are also used in consumer devices such as head-mounted displays for mobile computing/entertainment, digital cameras, and mobile phones, offer the virtual equivalent of a direct-view display (CRT monitor, LCD, etc.), with image sizes ranging from 13" to 70". The de-coupling of the image size from the size of the device creates a great deal of versatility. The OPMI is a perfect example of how microdisplays allow information to be

accessed in ways that simply are not possible with direct-view displays.

About Carl Zeiss

CCarl Zeiss is an innovative technology leader in the fields of optics, precision engineering and electronic visualization. Time and time again, Carl Zeiss has set new, pioneering standards in sophisticated technology for recognizing, experiencing, measuring, analyzing, structuring and processing a wide spectrum of objects. Carl Zeiss produces professional optics for demanding applications not only in research, medicine and industry, but also for leisure time activities. Surgical Products Division of Carl Zeiss pioneered the concept of the surgical microscope, and today continues to be the worldwide leader in optical and digital visualization solutions for surgical applications. Additional information on the Surgical Products Division can be found on the Internet at: <http://www.zeiss.de/surgical>.

About Colorado MicroDisplay, Inc.

Colorado MicroDisplay, Inc. (CMD) is the mobile content visualization company. CMD's patent-pending, breakthrough liquid crystal on silicon microdisplay technologies enables the delivery of rich, high-resolution, full-color graphical and video content in the exploding mobile products markets. CMD's tiny microdisplay solutions are optimized to provide large high-quality virtual images, while maintaining low power and low cost when used in digital imaging, entertainment, computing, and communications products. CMD's microdisplays are a key enabler in delivering a compelling display interface in ultra-portable products, increasing the amount and quality of information that can be distributed, created and shared in mobile devices and services. Founded in 1996, CMD is based in Boulder, Colorado and supports international markets and customers. Current investors in the company include GE Capital, Texas Instruments, Intel, InFocus Corporation, Granite Ventures (formerly Hambrecht and Quist Ventures), Mustang Ventures Fund, Vulcan Ventures, Telesystem-Argo Global Capital, 3i, Sequel Venture Partners, Polaroid Corporation, and others. Additional information on the company can be found on the Internet at: <http://www.comicro.com>.

Editors Note: The OPMI ® Neuro MultiVision microscope can be seen April 23-25 at the 2001 annual meeting of the American Association of Neurological Surgeons, in the Carl Zeiss exhibit (Booth #1023 - Hall E) Metro Toronto Convention Centre, 255 Front Street West, Toronto, Ontario M5V 2W6 Canada.

Click on the thumbnails below to download a high resolution image.

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