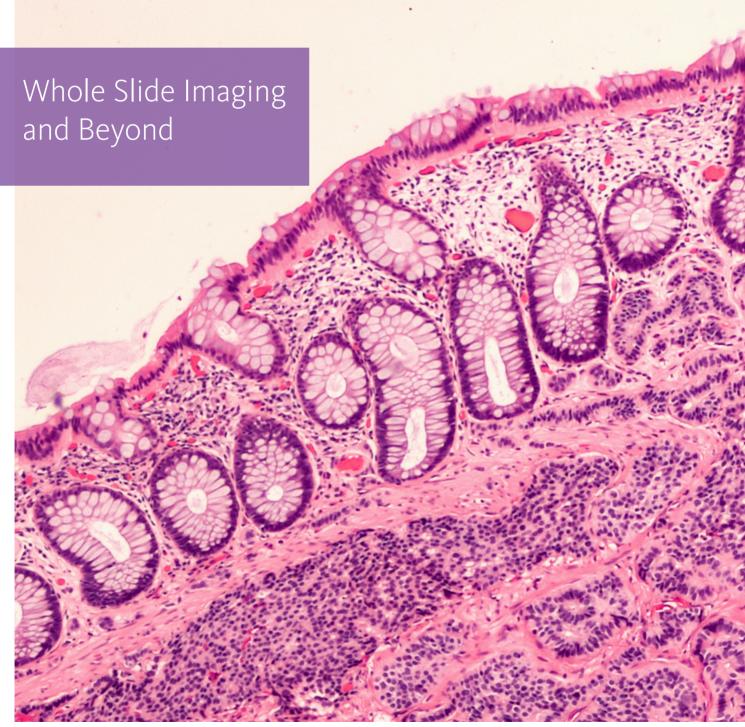


CellScan: The most flexible whole slide scanner

Digitize your Workflow



www.molecular-machines.com

Flexibility Redefined

The MMI CellScan is compatible with a wide range of research microscopes, offering you the flexibility to choose the microscope that best suits your needs. Whether you're working with brightfield, multi-fluorescence, confocal, phase contrast, or any other imaging mode, CellScan captures your samples with unparalleled details.

CellScan is a gateway to limitless digital imaging possibilities

CellScan supports various sample formats. From conventional glass slides to petri dishes with living cells, and membrane slides designed for laser microdissection. This unmatched flexibility ensures that CellScan meets the diverse needs of various applications, like in digital pathology, cell biology and oncology.



The MMI CellScan on the Nikon Eclipse Ts2R. CellScan is compatible with numerous research microscope and all imaging modes.



Most Flexible Whole Slide Scanner

The MMI CellScan is compatible with all objectives, numerous research microscopes and all possible imaging modes.



Operate from any Location

Unlock the potential of virtual microscopy and view your whole slide images remotely with unlimited licenses of the MMI imaging software.



High Performance

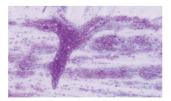
Scan a 15 mm x 15 mm section in less than 60 seconds and a full 75 mm x 25 mm slide in less than 7 minutes (20x objective).

Precision in all 5 Dimensions

Take control of your research with CellScan's ability to scan full-resolution digital slides in 5D. Navigate seamlessly in the X-Y axis, explore the depths of your samples in Z-stack mode, capture dynamic changes over time with time-lapse imaging, and unravel the complexity of multi-fluorescence imaging. The MMI whole slide scanner supports you in conducting experiments exactly as you envision.



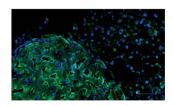
X-Y axis: Villi of small intenstine - 100x objective



Z-stack: Vaginal swab recorded with different Z-stacks

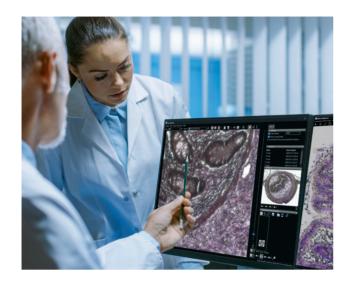


Time-lapse: HeLa cells monitored over several hours



Multi-fluorescence: Mouse kindey stainind with DAPI (nuclei) and CF-594 (laminin)

Imaging Software at the Forefront of Innovation



Empower your whole slide imaging experience with precision and ease. The MMI analyzing software comes with unlimited licenses, facilitating remote and interactive work within larger teams. The whole slide images are instantly loaded as BigTIFF.

Capture and annotate

Mark and annotate cells and regions of interest effortlessly with the added capability to export and reload marked areas. Insert scale bars, measure distances, and utilize this functionality for laser microdissection with the MMI CellCut.

Stitching perfection for best image harmony

Sophisticated stitching function, ensuring a perfect alignment of individual images without any overlap or artefacts along the edges.



Scanning in 5 Dimensions

Scanning of full-resolution digital slides in 5D: XY-Scan, Z-stacks, time-lapse and multi-fluorescence, without compromising quality.



User-friendly Operation

Simply place your slides under the microscope and activate the scanning process.



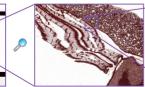
WSI Meets Laser Microdissection

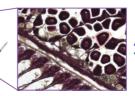
Benefit from a seamless transition between scanning and laser microdissection for an efficient workflow.

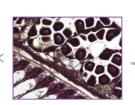
Whole Slide Imaging meets Laser Microdissection

Researchers from a multitude of fields use microdissection to selectively isolate single cells or tissues. The technique enables downstream analyses such as RNA sequencing. Scientists often discard the larger cut tissue section, losing valuable information from the original slide. However, MMI's CellScan, in combination with the CellCut Laser Microdissection system, allows researchers to image a tissue section and then precisely select cells and dissect the tissue while preserving information about the original uncut tissue and position information about the cut.











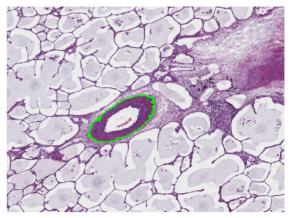
Workflow to combine the MMI CellScan with the CellCut laser microdissection System: 1. Scan your slide 2. Identify the target region 3. Mark target cell 4. Excise the target cell 5. Verify successful isolation

Expandable for Automated Image Recognition

CellScan stands out for its remarkable modularity, ensuring smooth compatibility and upgradability across the entire MMI device range. Featuring modules such as CellCut for precise laser microdissection, CellEctor for isolating cells in suspensions, and CellDetector leveraging artificial intelligence for automated cell and tissue identification, CellScan establishes itself as a flexible and adaptive platform to meet the dynamic demands of advancing research.

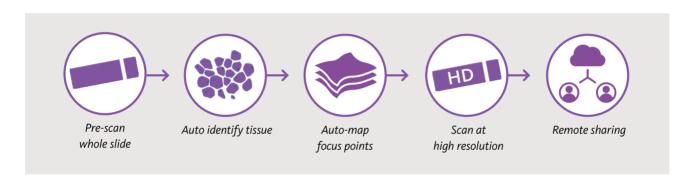
Automatically identify your cells

Do you need to analyze many slides for one specific cell type, or identify cells with a specific set of markers or parameters? The MMI CellDetector enables you to automatically identify cells or interest within a live image or within scanned whole slide images.



The MMI CellDetector can be trained on individual target areas based on color differences and on structures.

Fast and Easy Workflow



Better service starts here



"The MMI CellScan whole slide scanner supports us in our daily work: this tool documents our tissue sections in high resolution and it fully integrates into our laser microdissection workflow. We especially appreciate that we can annotate directly in the image thus saving hands-on time at the instrument."



Prof. Dr. Danny Jonigk

Director of the Institute of Pathology, Aachen University Medical Center, Germany

CellScan_Brochure_4p_EN_A



