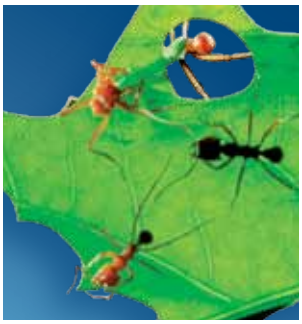
MMi

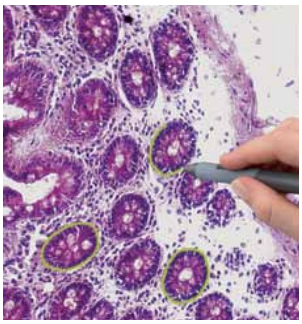
Molecular Machines & Industries

Leading the way





in micromanipulation

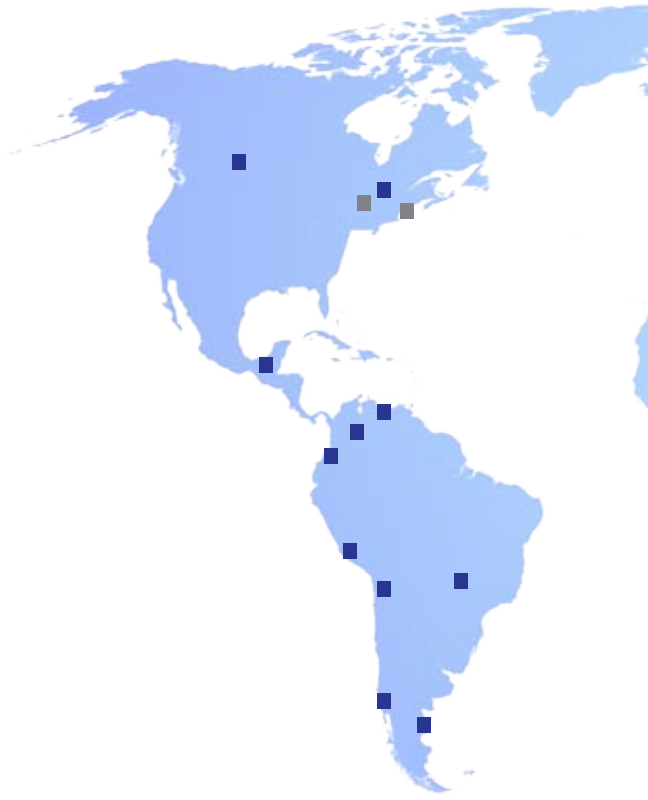
The leading solution provider for unlimited micromanipulation

The specialist

Molecular Machines & Industries (MMI) is the leading provider of microscope based micro-manipulation solutions for the life sciences, material sciences, and healthcare. We specialize in single cell handling, laser microdissection and optical tweezers for a wide range of clinical and research based applications. MMI is a high value partner for our customers providing world-wide unique competence in micromanipulation and single cell handling.

The worldwide network

The MMI head office is located in Zurich, Switzerland. Further offices are situated in Munich, Germany and in Haslett, USA. Along with an established distribution network, MMI is represented worldwide and in a strong position to cater to the global market.



MMI

The MMI Management (from left): Philipp Mathys (Sales & Marketing), Dr. Stefan Niehren (Research), Prof. Dr. Stefan Seeger (Chairman of the Board of Directors), Jürg Ackermann (Finances), Norbert Brill (Technology and Production)

The success story

Founded in 1998 by Prof. Dr. Stefan Seeger in Heidelberg, Germany, MMI moved in 2001 to Zurich, Switzerland. Since then, MMI emerged into the global market and today has established a broad instruments base all over the world.

Our commitment

Our core competency is the development and establishment of innovative, efficient, and cost effective micromanipulation solutions for specific applications. Thereby we heavily invest into new technologies, quality, and in continual training for our employees and distributors. To meet our quality goals we are continually optimizing our processes, the benefits: state-of-the-art instruments, outstanding sales and service support, and highly successful research.

Cutting-edge technologies for a healthy tomorrow

About the need for single cell sorting

In medical diagnostic or life science research, it is crucial to get high quality homogeneous tissue samples, especially in genomics, transcriptomics, and proteomics. Enriched cell populations from tumor, endothelial tissue, histocytes, stem cells, and other materials are a prerequisite for analysis and patient profiling.

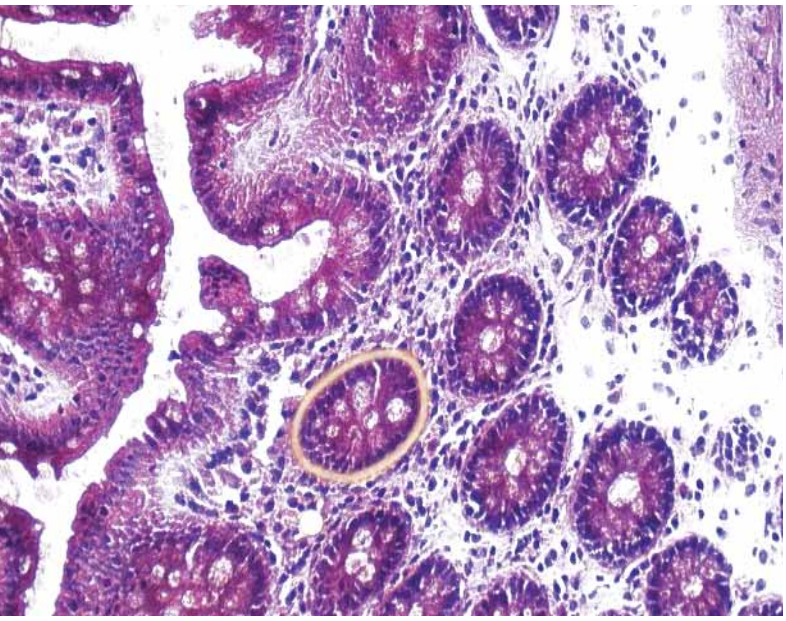
single

cells

Biomedical research and cellular diagnostics

The MMI instruments series is designed for the detection and isolation of single live cells, stem cells and circulating tumor cells from suspension or tissue under full process control. It is for example utilized in cancer research and clinical oncology for the enrichment of tumor cells from disaggregated lymphnode blood and bone marrow samples as well as in immunology and virology for the study of monoclonal human antibodies. Furthermore, the MMI CellEctor Plus is widely used for a range of applications in stem cell research and cellular diagnostics.

Sophisticated instruments for fast and reliable diagnoses



Laser microdissection

Laser microdissection is a widely utilized technology in life sciences research and for clinical applications. It is mainly used to accurately dissect diseased cells from healthy heterogeneous biopsy material. Laser microdissection is an essential tool for early diagnosis of cancers and neurological disorders, and it is established as a step towards personalized medicine.

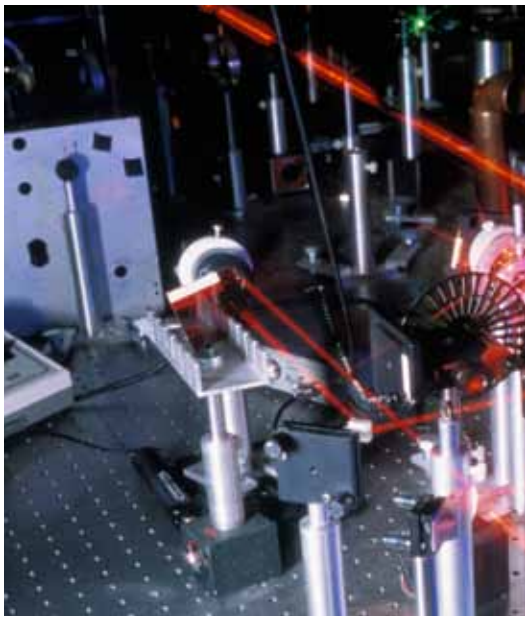
molecular

pathology

An essential contribution

MMI's laser microdissection technology is unmatched in its accuracy and precision. Its benefits are widely used in the areas of traditional research, for cancer and personalized medicine. It enables the establishment of new cellular and molecular analytical techniques with real diagnostic and therapeutic impact. For this reason, MMI instruments are approved to be an essential part in the fight against life-threatening diseases. They are always robust, reliable, user-friendly, and provide results quickly for all downstream applications.

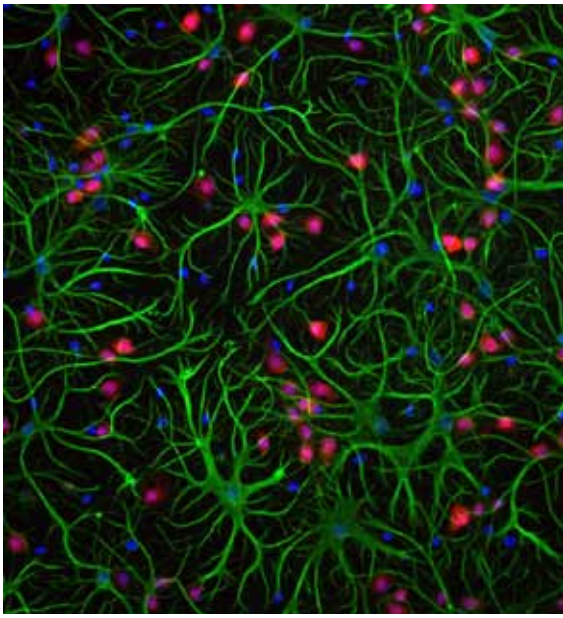
Effective workflow management and individual solutions

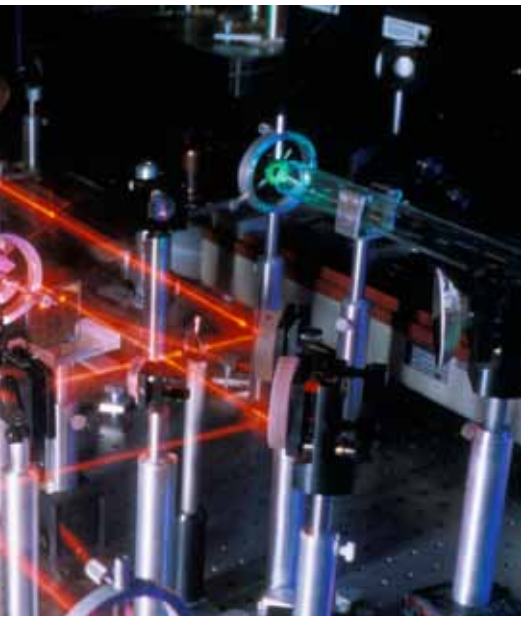


scientific &

Experience and quality

Our goal is to always meet customers requirements in making the perfect micromanipulation tools for their specific applications. Therefore, we heavily value and invest into Research and Development. Our R&D specialists are experienced in the medical devices market and are constantly extending their knowledge base by participating in various research projects and by networking extensively and globally with biotechnology institutes.

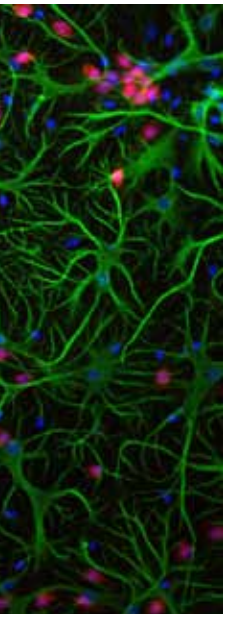


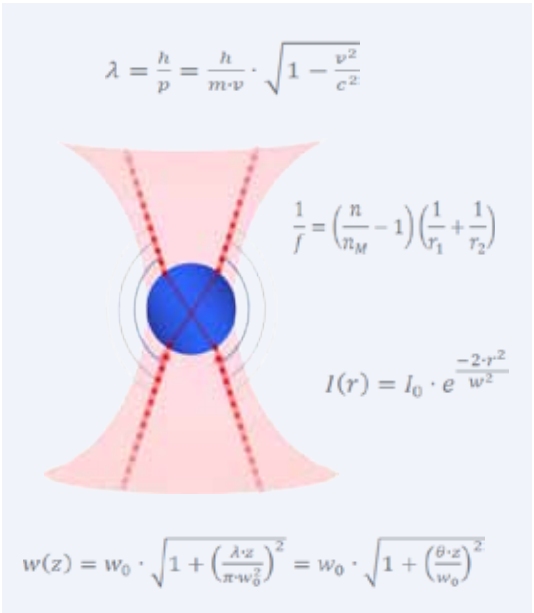


Unmatched flexibility

The major advantage of MMI solutions is the highly modular instrument platform which allows for an easy integration of different modules, advanced options, or further micromanipulation technologies without compromising on functionality. This offers our customers most flexibility for a wide range of applications and for the development of integrated workflows.

customized





Worldwide happy customers and successful installations

A close collaboration

Our customers include worldwide renowned universities, hospitals, institutes, laboratories and industry. We collaborate closely with customers, researchers and scientists on site, support them, and learn from their experience to develop bespoke workflows to enable them to rapidly meet their goals. Don’t listen to us, instead see what customers have to say about their own experiences and working with MMI.

testimonials

Dr. Jonigk and his team work in the field of lung tumor diseases, fibrous lung remodeling under different circumstances, and pulmonary hypertension. The focus is on the combination of clinically relevant issues and the morphology of the tissue, and on the expression of DNA, RNA,and proteins in sub-compartments of the lung. With the MMI CellCut Plus laser microdissection system, Dr. Jongik is able to retrieve high quality samples from the starting material. This significantly improves the accuracy of his results.

"We appreciate the resistant MMI product quality, the professional consulting, and the competent and quick service. MMI instruments are an important basis for our in-situ analysis in cellular tissue. Laser microdissection followed by gene expression analysis is complementary for further routine methods like conventional optical microscopy (fluorescence), in-situ hybridization, and immunohistochemistry."

Dr. med. Danny D. Jonigk
Pathological Institute
Medical School Hannover, Germany

Chengxun Liu, senior researcher from Imec, Belgium, focuses on the study of physiological property of circulating tumor cells (CTCs). His team aims to identify CTCs from human peripheral blood by their characteristic electrical and physical properties to facilitate the capture of viable CTCs for downstream genotyping. An upright MMI optical tweezer allows CTC manipulations directly in their no transparent microfluidic chip.

"The MMI CellManipulator Plus optical tweezer was customized on an upright microscope upon our request. The tweezer has been working reliably, with excellent manipulation power and flexibility on various devices, from simply glass slides to microelectrodes on silicon. The MMI service was also professional, fast and considerate."

Chengxun Liu, Ph.D.
Bio-Nano Electronics Department
Imec Belgium

MMI Molecular Machines & Industries AG
Flughofstrasse 37 | CH - 8152 Glattbrugg | Switzerland
phone +41 (0) 44 809 10 10 | fax +41 (0) 44 809 10 11
E-Mail info@molecular-machines.com

MMI Molecular Machines & Industries GmbH
Breslauer Strasse 2 | D - 85386 Eching | Germany
phone +49 (0) 89 319 048 40 | fax +49 (0) 89 319 048 59
E-Mail info@molecular-machines.com

MMI Molecular Machines & Industries Inc.
PO Box 348 | Haslett, MI 48840 | USA
phone +1 - (603) 629 9536 | fax +1 - (321) 978 0304
E-Mail sales_us@molecular-machines.com

www.molecular-machines.com

Published by Molecular Machines & Industries AG,
Glattbrugg, Switzerland | 1st edition, 2012