## **Customer Story**



## Challenge

 Precise and reliable instruments for complex PCR reactions for research purposes

## Solution

 Thermal cyclers of the Biometra series

## **Benefits**

- Industry leading precision
- Best temperature control
- Highly reproducible results
- Ease of use

# "The Biometra devices have proven to be very robust and reliable for complex PCR reactions."

**Prof. Dr. Ralf Küppers** Professor for Molecular Genetics at Insitute for Cell Biology (Cancer Research), University of Duisburg-Essen

## PCR for Complex Research Applications

Prof. Ralf Küppers teaches and conducts research at the University of Duisburg-Essen. He was one of the first scientists to have established a completely new PCR methodology in research practice. Thanks to his work, the cellular origin of Hodgkin lymphoma is known, among other



Offen im Denken

contributions. For his research, Prof. Küppers has been placing his trust in the PCR expertise of Biometra and Analytik Jena for over 30 years.

#### **Pioneering Work**

PCR stands for polymerase chain reaction. It is a process that stimulates the amplification of sequences of nucleic acids through targeted temperature regulation. The nucleic acid produced in this manner can in turn be used for additional PCR runs and multiplied further. Thanks to the PCR process, viruses and hereditary diseases can be detected genetically. Today, this method is part of the standard repertoire at every molecular biology laboratory. Biometra, which today is part of Analytik Jena AG, was one of the first companies to offer the thermal cyclers needed for PCR for a broad science market. The PCR specialists from Göttingen, Germany, quickly earned an excellent reputation for themselves. To the present day, the Biometra brand stands for outstanding PCR instruments worldwide. Prof. Ralf Küppers has made a major contribution to science by using Biometra devices. He teaches and conducts research at the University of Duisburg-Essen and is one of the pioneers of single-cell PCR. During his doctoral studies, he and his colleagues established a multiplex single-cell DNA PCR for the first time for analyzing individual B cells or B-cell lymphoma cells. This methodology helped to achieve significant progress in Hodgkin lymphoma research. Single-cell PCR made it possible to determine the cellular origin of this disease.



1000

"I have been using Biometra thermal cyclers since my time as a doctoral candidate in Cologne. I have remained loyal to the firm to this day"

**Prof. Dr. Ralf Küppers** University of Duisburg-Essen

### **Management Facts**

- High quality of instruments
- Fast communication with Analytik Jena
- Highly competent Sales and Service personnell
- Experience of 30 years cooperation

Prof. Küppers, as well as his colleagues Prof. Rajewsky and Prof. Hansmann, were awarded the prestigious German Cancer Aid Prize, which is conferred for outstanding research work in the area of oncology. PCR instruments from Biometra have been supporting Prof. Küppers for a very long time. "I have been using Biometra thermal cyclers since my time as a doctoral candidate in Cologne. I have remained loyal to the firm to this day," says Prof. Küppers, who has used many Biometra devices over the years. Biometra series thermal cyclers today are used throughout the University of Duisburg-Essen for a wide range of applications.

#### "Robust and Reliable"

The list of PCR cyclers that Prof. Küppers has used for his research over the years reads like a Biometra brand history: UNO, UNO II, TGradient 96, TProfessional 60, TOne, TRIO, and TAdvanced. He has already used nearly every thermal cycler model.

Prof. Küppers particularly appreciates the reliability of the PCR thermal cyclers of the Biometra series: "The Biometra devices have proven to be very robust and reliable for complex PCR reactions. Above all, the TRIO block and gradient function are very helpful for testing different conditions for new PCRs in parallel." In addition, the devices are particularly easy to program and operate, Prof. Küppers continues. He is particularly impressed by the sales and service of Analytik Jena: "Both the availability and quality of the technical service are excellent and the sales team is always there to take care of our needs."

#### About Prof. Küppers and the University of Duisburg-Essen

Prof. Ralf Küppers has held the chair for Molecular Genetics in the medical faculty of the University of Duisburg-Essen since 2004. He studied biology at the University of Cologne, where he also earned his doctorate and completed post-doctoral studies. The University of Duisburg-Essen was founded in 2003 as a result of the merger of the Universities of Duisburg and Essen which were separate at the time. The medical faculty has already been in existence in Essen since 1972. Today, the university has over 40,000 students and approximately 5,800 employees. Biomedicine is a research focus at the university. Additional information is available at <a href="https://www.uni-due.de/zmb">www.uni-due.de/zmb</a>.

#### Headquarters

Analytik Jena AG Konrad-Zuse-Str. 1 07745 Jena · Germany Tel +49 3641 77 0 Fax +49 3641 77 9279 info@analytik-jena.com www.analytik-jena.com en · 03/2020 Förster & Borries GmbH & Co. KG © Analytik Jena AG | Pictures ©: Analytik Jena AG / Prof. Dr. Ralf Küppers

