

**TOMORROW
LAB** SINCE 1945

75
YEARS

eppendorf





Celebrating 75 Years of Supporting Scientists

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LAB** SINCE 1945
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Editorial

*Ladies and Gentlemen,
dear customers, companions and partners,*

Eppendorf is a matter of the heart.

And matters of the heart stay with you – for a lifetime. For the past 75 years, Eppendorf has been the reliable partner to our customers across the globe, employer to more than 3,500 colleagues, and an expert in the field of Life Sciences. A family business with the highest standard: you can always rely on Eppendorf!

“To improve human living conditions” – our company mission statement, coined by our founders, is as current and relevant now as it was then. Since 1945, and into the future, it is our guiding principle and our passion. On the occasion of our 75th anniversary, we invite you to not only look back but also to join us in looking closely at the topics of the future; as always, Eppendorf expects to improve the world of tomorrow – today. In this booklet, we present five major questions regarding the future which illustrate the opportunities and the meaning of the Life Sciences of the future to scientists and to us alike. Discover why Eppendorf has been the TOMORROW LAB since 1945. And what it is that is close to our hearts.

Our heart beats for our customers in the laboratory. This is where ever-evolving safety, highest quality and user-friendliness play important roles. The tremendous technological advances that have occurred since the founding of Eppendorf, as well as our contributions to this development, reflect innovation, inventive genius and curiosity to this day.

The future of the Life Sciences and of research in general is not written in stone – it is uncertain, and tomorrow something entirely new will be of relevance. That being said, a strong foundation provides us with a base to which we can securely anchor future developments. Eppendorf thinks in terms of sustainability: it invents anew, questions and optimizes the foundations on which to build – with agility and a networked future in mind.

The steady stream of new challenges: with Eppendorf as a strong partner by your side, you will meet them with confidence.



Our heart beats for our colleagues who at their locations around the world give their all for Eppendorf on a daily basis. They lend Eppendorf its potential, and they transform our teams into places where everyone makes a contribution and where the mission of our founders is kept alive every day. We deeply appreciate this commitment. Everyone at Eppendorf works with passion, and we believe in the strength of our community and in the Eppendorf brand. Trust in the future – an integral part of everyone here at Eppendorf.

Our heart beats for our partners and companions who make Eppendorf strong. Those who meet us at eye level and who recognize Eppendorf as a company with potential and who share our courage to continue to advance the field of Life Sciences, together.

Eppendorf means something different to every one of us, and to everyone who chooses Eppendorf, it is more or less a matter of the heart. We are very grateful for the privilege of sharing this anniversary with you! For the past 75 years... and also tomorrow – Eppendorf is by your side.

Warmly,

Dr. Peter Fruhstorfer

Eva van Pelt

Dr. Wilhelm Plüster

On the following pages, we invite you to immerse yourself in the major questions of tomorrow – and to get to know the company Eppendorf all the way back to its humble beginnings.

Asking the Big Questions of Tomorrow, Today.



»How important is the past for the future?«



»What contribution does fundamental research make to our health?«



»How to ensure the quality of our daily needs?«



»How can we age more healthily in the future?«



»What does tomorrow's research look like?«

»How important is the past for the future?«

1



When doing research, the focus always tends to be on the future: What's the next step? In which direction is the field moving? What new discoveries lie ahead?

In these situations, it's sometimes good to take a step back and think about how we got here. What can we learn from the past when stepping into the future? A lot of this comes back to trust; the trusted methods and trusted technologies that form the basis of our work today often remain a valuable building block for the new developments of tomorrow.

The same principle applies to the manufacturers that support scientists in their work. This year marks the 75th anniversary of Eppendorf as a company. Throughout these years, we have gained the trust of generations of researchers in the laboratory with our products - most notably, of course, the iconic "Eppi®".

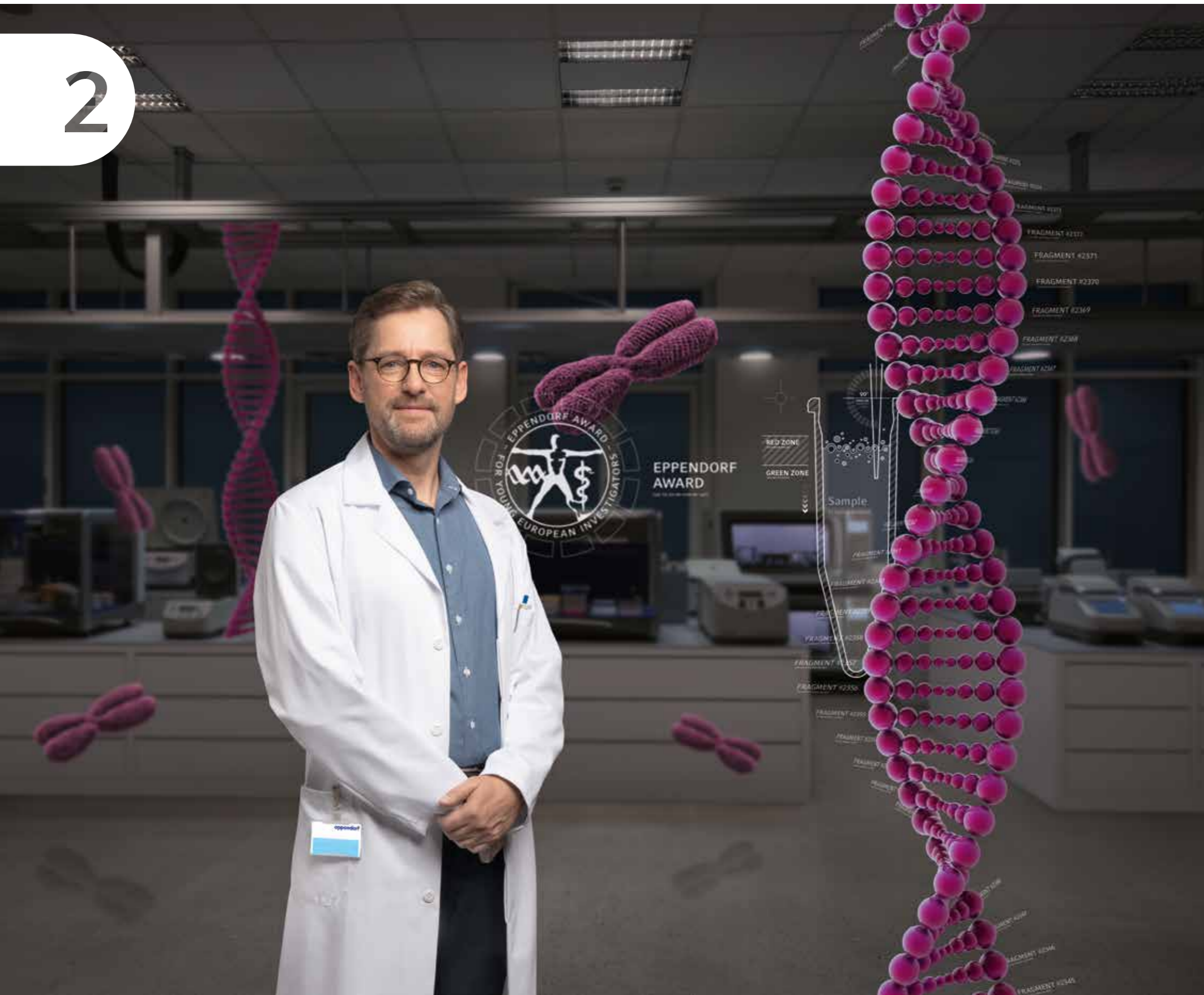
But we didn't stop there. Our scientists and engineers are on a constant mission to build on trusted methods to help address the challenges that today's scientists face. It's easy to see this in the field of genomics. Researchers have been using our pipettes to set up their PCRs for decades, but as experiments in the field of genomics increase in scope, manual pipetting quickly becomes very time-consuming.

This is why we developed the epMotion® automated liquid handling systems – fast, easy-to-use systems that build on years of experience in liquid handling and use this experience to help scientists with the challenges of today and tomorrow.

Who knows what the next 75 years will bring!

»What contribution does fundamental research make to our health?«

2



"If our society continues to support basic research on how living organisms function, it is likely that my great grandchildren will be spared the agony of losing family members to most types of cancer."

Paul D. Boyer, Nobel Prize in Chemistry, 1997

Improving health is something that underpins the vast majority of research in life science. And it's not just about finding better treatments, or entirely new approaches such as stem cell-based treatments; it's also about detecting disease earlier, shedding light on the complex origins of disease, and understanding how the delicate balance of the microbiome affects health.

In the whirlwind of headlines about breakthroughs in medical research, it's sometimes easy to overlook the fundamental research that laid the foundation for new treatments or new insights. Luckily, it is not always overlooked. The 2019 Nobel Prize in Physiology or Medicine was awarded to researchers in the United States and the United Kingdom for the fundamental discovery of how cells sense and adapt to oxygen availability. This understanding gives insights into new treatments for conditions ranging from cancer to anemia and heart disease.

We at Eppendorf are passionate about supporting scientists engaged in fundamental research. Aside from providing cell and molecular biology users with their day-to-day lab needs, we also support the Eppendorf Award for Young European Investigators. Established 25 years ago, it is presented in partnership with the journal Nature® and acknowledges outstanding contributions to biomedical research in Europe.

Keep an eye out for the next winner of this prestigious award.

»How to ensure the quality of our daily needs?«

As the human population continues to grow, how can we be certain there will be enough food and resources in the future to support our needs?

The United Nations estimates that by 2100 the human population will increase to ten billion – and while land suitable for growing crops is becoming increasingly scarce, the land area devoted to agriculture would have to double in the next 35 years in order to feed everyone.

This clearly highlights the fact that we are going to have to become more inventive and efficient in the way we produce food and use raw materials. Crops will need to become more nutrient-rich and tolerant to the effects of climate change. And we also have to make sure that the food we produce is safe.

Molecular biology techniques can play a key role, both in food research and in food quality testing. The great thing about using molecular biology in food testing is that scientists can get their results very quickly, so testing doesn't cause any significant delays.

At Eppendorf, we support scientists working in food testing, research, and production around the globe with products such as pipettes and tips, tubes, centrifuges, mixers, photometers, and freezers – as well as automated liquid handling systems for high-throughput testing. Our technology is used worldwide to help governments and agencies ensure that the food they test is safe – because only safe food ensures our survival.



3

»How can we age more healthily in the future?«

Thanks in part to advances in biological and medical research, humans on average now live longer than ever before. As this change continues, more attention will be focused not just on preventing and curing diseases, but also on ageing itself – and on how we can age healthily.

Our understanding of the way humans age has come a long way. We can now study genetic changes in individual cells to see how they contribute to ageing and associated diseases, leading to more effective treatments when things go wrong.

An example of this increased understanding is the important role that our microbiome plays in ageing. The microbiome consists of all microorganisms – bacteria, fungi, protozoa, and viruses – living in or on the human body. Studies have shown how the microbiome of our intestines changes dramatically during ageing, and that these changes are linked to human health and lifespan.

For a quarter of a century, we've been supporting research into ageing and other areas of molecular biology through the Eppendorf Award for Young European Investigators in partnership with the journal Nature®. In 2018, Professor Andrea Ablasser was awarded the prize for showing that a mechanism involved in the immune response is also activated in ageing cells.

As with the last 75 years, we will continue innovating to ensure molecular biologists have access to the most ground-breaking, reliable, and consistent products to give them the best chance of success in their research. And we look forward to continuing to support this success through the Eppendorf Award for Young European Investigators.



»What does tomorrow's research look like?«

Many areas of life will experience far-reaching innovations in the future. But what does this mean for the researchers who are seeking to realize these aims?

Some of these innovations are already applied in labs today. One of these is big data. The amount of data we can store and the speed at which it can be processed has been increasing exponentially for decades, and these abilities are having an enormous impact in many areas of life science research.

Lab automation will also inevitably continue in years to come. In today's labs, automation is still mostly associated with repetitive, high-throughput tasks, but as machines and software get smarter and the role of Artificial Intelligence (AI) is expanding, it will also become possible to use automation in research tasks that require adjustments based on initial results.

And what other areas will define the lab, or researcher, of tomorrow? It has been suggested that introducing gamification and game theory elements into research will contribute to the research of the future, but maybe the next big thing will come from somewhere nobody expects.

In the last 75 years, we at Eppendorf have been leading the way in applying the latest technologies to support the scientists of tomorrow. You can see this in one of our core areas – pipetting – where we support automation through our epMotion® automated liquid handling systems, place user ergonomics at the center with our PhysioCare Concept®, and improve connectivity with our new connected pipette.

But we have not stopped there. We have also teamed up with other companies in the smartLAB collaboration to work on new digital solutions for labs worldwide. Our VisioNize® and eLAB™ applications helps scientists digitize lab tasks that are often done manually, such as equipment control, inventory management, and lab journal writing – thereby helping labs to become connected, paperless, and ready for the future.



5

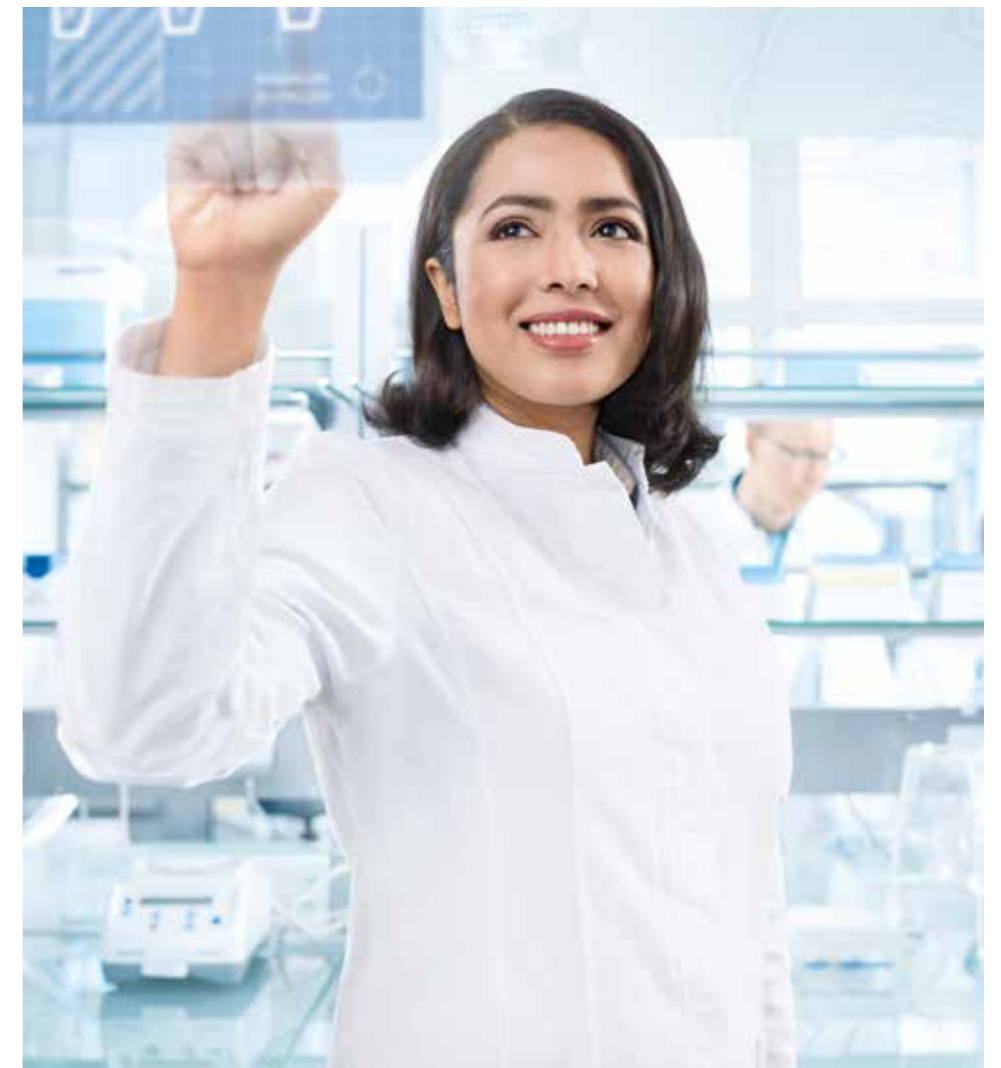
Yesterday and Today. For Tomorrow.



Yesterday –
Thinking big, improving in every detail



Today –
A global presence, close to the customer



For Tomorrow –
In step with the times, standing side-by-side
with science

1945 Until the Present – Thinking Big, Improving in Every Detail

At the University Hospital in Eppendorf, Hamburg, Dr. Netheler and Dr. Hinz start running their business, later developing products for medical diagnostics.

1947 their new company is registered as "Elektromedizinische Werkstätten GmbH".



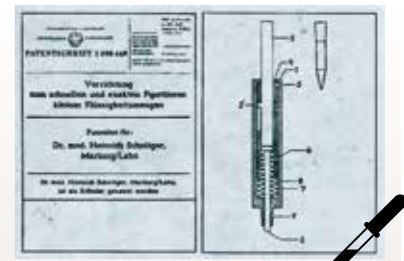
1945



1949

Eppendorf develops a new photometer for clinical applications. The use of spectral lines was an early example of spectroscopy in routine laboratory applications. Over time, the device became a world standard for chemical and biochemical analysis and the technique is still used today.

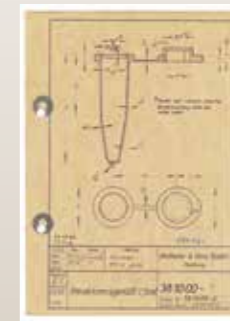
Eppendorf launches its revolutionary piston-stroke microliter pipette, ushering in the age of precise and rapid pipetting. Up until this point, scientists pipetted their samples by mouth into glass tubes.



1961



Following the success of the microliter pipette, Eppendorf develops a complete microliter system, consisting of reaction tubes, mixers, centrifuges, and pipettes. Now pipetting work could be performed faster, more precisely and with a fraction of the sample volume required previously.



The world-famous "Eppi" reaction tube is introduced.



1963



The first Multipette® with Combitips® is launched, going on to become one of most successful products of Eppendorf.

In 1981 The 1,000,000th Eppendorf microliter pipette is manufactured.

In 1985 Eppendorf reaches 1,000 employees in the same year that the 100,000th Multipette is manufactured and the Microinjector is launched. This development of the microinjector allows scientists to inject fluids into individual cells, turning the cell itself into a test tube.



1978

The company celebrates the launch of the Mastercycler® for DNA amplification, and the production of the 50,000th Centrifuge 5415 C.



1996



To make manual micro-injection and dispensing fluids easier, more ergonomic, and more precise, Eppendorf launches the CellTram® air and oil micro-injectors for controlling pressure.

1992

Eppendorf records 30 years of innovative automation of laboratory products. From the first spectral line photometer, through the first semi-automated workstation, to flexible laboratory information systems – Eppendorf makes users' lives easier.

In 2003 the epMotion 5070 is introduced, the first automated pipetting system of Eppendorf.



1993



Eppendorf celebrates 75 years of supporting scientists. At the same time the Young European Investigator Award honors its 25th award winner.



The company reaches 2,000 employees and acquires New Brunswick™ Scientific, enriching the product portfolio with a range of equipment for cell culture, detection, and storage.

In 2012 Eppendorf expands its bioproduction business with the acquisition of the DASGIP® Group.

2007



2020

A Global Presence, Close to the Customer

Quality, reliability, experience, innovation

These are words that people worldwide associate with Eppendorf today. We believe this highly regarded reputation is the result of our 75-year history and commitment to deliver the best solutions for handling your most precious samples. Our product range today includes pipettes and automated pipetting systems, centrifuges, mixers and DNA amplification equipment as well as ultra-low temperature freezers, bioreactors, CO₂ incubators and more.

Consumables such as pipette tips and test tubes complement the range of highest-quality premium products. But Eppendorf is not just about products; we're equally committed to providing quality support. Knowledgeable and experienced Eppendorf professionals will assist you every step of the way. And, we will help you integrate your Eppendorf products into your lab workflows to ensure maximum accuracy and reliability of your results.

The experience and competence to handle the needs of our customers

The broad product range of Eppendorf covers three competence areas:



Liquid Handling

In 1961, Eppendorf launched the first piston-stroke pipette. Today, our broad product selections in Liquid Handling range from manual pipettes to electronic pipettes, dispensers and burettes to automated pipetting systems.



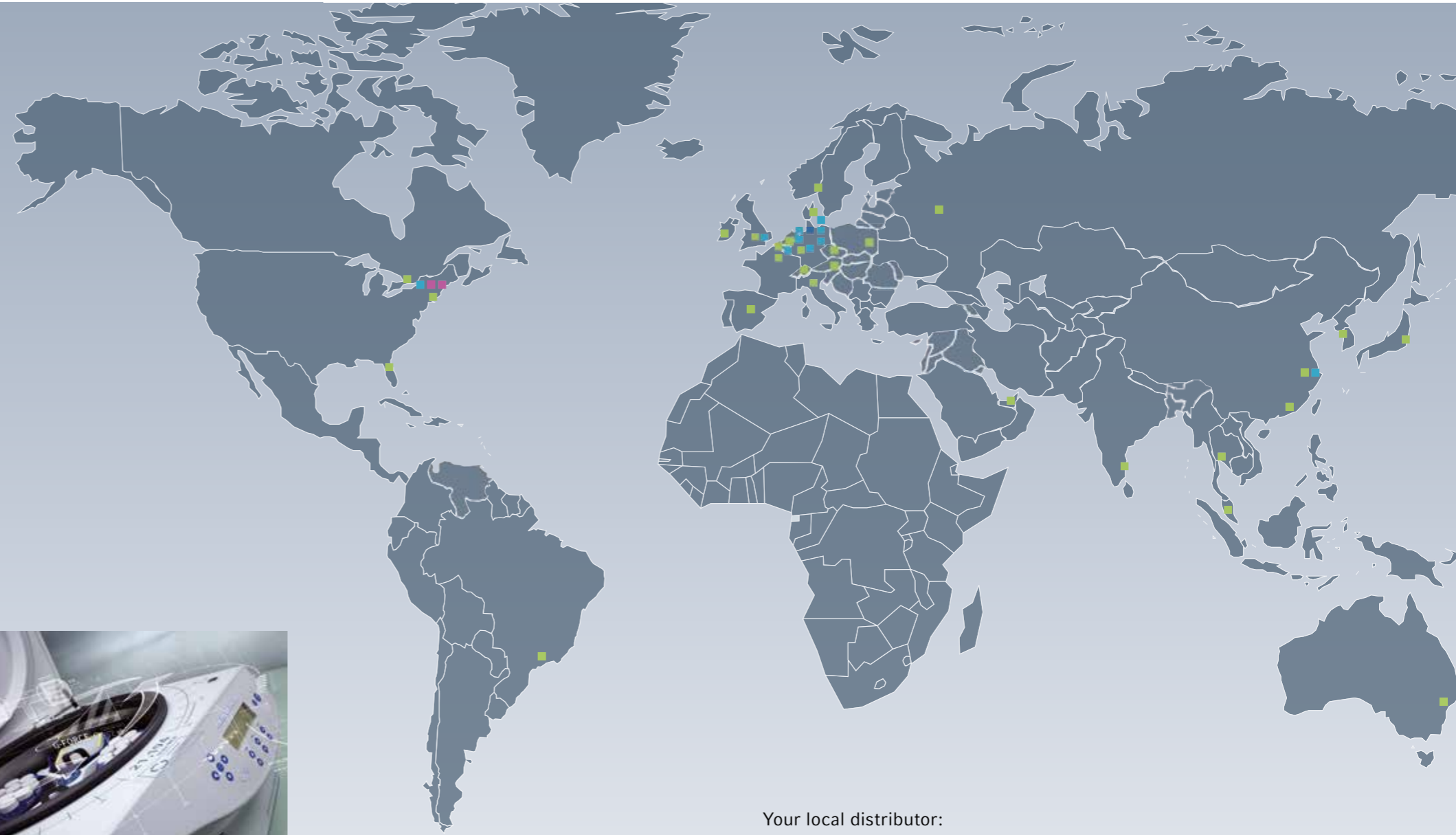
Cell Handling

For handling cells, in addition to manipulators and injectors, incubators and consumables for cultivation, as well as complete bioreactor systems for cell culture applications, are also available. Corresponding detection systems are offered for subsequent analysis.







Sample Handling

Sample Handling encompasses many different work processes and steps: centrifugation, heating, freezing, mixing, amplification, and analysis of samples. Eppendorf offers the devices and consumables needed for each of these steps.



Your local distributor:
www.eppendorf.com/contact

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-  Sales subsidiary
-  Entity with regional/global functions
-  Competence center for science, technology and production

In Step with the Times, Standing Side-by-Side with Science

»Shaping digitalization, offering new products and solutions – here at Eppendorf, all signs point to the future.«

Dr. Peter Fruhstorfer,
Co-CEO & Chief Business Officer



Trailblazers of Digitalization

With VisioNize, digitalization is coming to every laboratory. And thanks to the eLAB software, every sample is listed and every experiment recorded – intuitively and securely! Eppendorf has been actively involved in digital laboratories and lab solutions for a long time. This is because, without a doubt, the future in the laboratory is one thing above all: smart and digital! Developed side by side with customers according to principles of agility, the intelligent assistants are already increasing productivity and safety in labs around the world and are reshaping our customers' day-to-day work. With Eppendorf at your side, you can confidently send your digital lab on its way into a smart future.



Sustainability – Not Just a Promise

Thanks to our founding fathers' attention to social, ecological, and entrepreneurial sustainability, this issue has a strong influence on decisions of Eppendorf. It should be visible in every process: starting with product development, through manufacture, sales, the use of the product, right up to its disposal. In doing this, Eppendorf tries to involve suppliers and sales partners around the world. Sustainability is a continual process of improvement: many different steps, even small ones, help to bring us forward.

»Being able to better serve our customers around the world even faster – and in doing so, provide them with the latest innovations – is something that is close to our heart.«

Dr. Wilhelm Plüster,
Chief Technology Officer

»An increased market presence and proximity to customers – particularly engagement with customers – far beyond the classic sales process and dialog is important to us.«

Eva van Pelt,
Co-CEO & Chief Commercial Officer



For the Research of Tomorrow

Each year, young scientists performing biomedical and neurobiological research can submit their work to compete for two prizes: the Eppendorf & Science Prize for Neurobiology and the Eppendorf Award for Young European Investigators showcase extraordinary scientists every year. Eppendorf awards these prizes under strict criteria together with renowned expert panels and has thereby been supporting the research of tomorrow for 25 years.



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