

# ENGAGED

**Every day, we strive to develop and produce innovative diagnostic solutions. Serving public health and taking care of the world around us, that's what our engagement is all about.**



## Pioneers

**Since 1963, we have been pushing the boundaries of *in vitro* diagnostics to develop evermore efficient solutions and anticipate future trends.**

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## Challenges

**The world is moving quickly and so are we! We develop solutions based on the evolving health challenges and needs of our customers.**

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## Boosters

**Innovation is a mindset that we cultivate at all levels of the Company by investing in research and empowering to dare.**

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## Interactions

**As a corporate citizen, we are aware of our responsibility towards the environment and attentive to the needs of our team members.**

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## Directions

**Our non-financial and financial performance reflects our engagement, as well as the long-term strategy supported by our governance.**

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# Pioneers

SINCE 1963, WE HAVE BEEN PUSHING  
THE BOUNDARIES OF *IN VITRO* DIAGNOSTICS  
TO DEVELOP EVERMORE EFFICIENT SOLUTIONS  
AND ANTICIPATE FUTURE TRENDS.

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**PIERRE BOULUD**, Chief Executive Officer (left), and **ALEXANDRE MÉRIEUX**, Chairman of the Board of Directors of bioMérieux (right).

SINCE JULY 1, 2023, ALEXANDRE MÉRIEUX HAS HELD THE POSITION OF CHAIRMAN OF THE BOARD OF DIRECTORS AND PIERRE BOULUD THAT OF CHIEF EXECUTIVE OFFICER. **TOGETHER, THEY LOOK BACK AT THE MAJOR CHALLENGES FACING BIOMÉRIEUX AND THE *IN VITRO* DIAGNOSTICS SECTOR.**

● **DUAL INTERVIEW**

**bioMérieux just celebrated its 60<sup>th</sup> anniversary, how can we define the Company today?**

**Alexandre Mérieux (AM)** — Since its creation in 1963, bioMérieux has the ambition to contribute to improving public health. Our purpose was clearly illustrated by COVID-19; the whole world has become aware of the importance of *in vitro* diagnostics in the face of this pandemic. This role will only strengthen in the coming years, as the emergence and spread of infectious diseases is intensified by climate change and globalization. Today, everyone understands the essential role of diagnostics.

**Pierre Boulud (PB)** — In such an uncertain context, bioMérieux can count on the commitment of the Mérieux family, which ensures stability in governance and promotes the long-term prosperity of the Company. Our organization is also characterized by its capacity for innovation, allowing us to imagine tomorrow's diagnostic solutions, which will detect infectious diseases better and faster.

“  
**Today,  
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**With the new governance, to what extent are your two respective roles complementary?**

**AM** — Our environment is complex and constantly evolving, which is why we have chosen to split the governance. On one side, the Chairman of the Board of Directors focuses on the overall strategy, while participating in defining priorities in terms of innovation and Corporate Social Responsibility (CSR). At the same time, the Chief Executive Officer leads the implementation of the strategy and development of the activities.

**PB** — For a company, this is an opportunity to have a chairman focused on the medium and long term without being consumed by day-to-day management. Alexandre and the Mérieux family remain fully committed to the future of the Company and its team members. This approach makes it easier to look at the big picture, while creating momentum at the head of the organization. There are now two of us to do the work that Alexandre previously did alone. We are going to make this a real opportunity!

**What are the major challenges facing the field of clinical diagnostics?**

**AM** — We need tests that provide increasingly fast and reliable results. This is particularly true for patients suffering from sepsis, where time is of the essence. Decentralization is also a priority. More and more diagnostic tests must be carried out closer to the patient, outside of traditional laboratories.

**PB** — Today, hospitals and laboratories generate a large amount of data; managing and leveraging this data for the benefit of patients is another major challenge. We offer a wide range of software solutions capable of transforming this data into useful and actionable information, to facilitate diagnostic and clinical decision-making at all stages, from patient-centered care to public health monitoring.

**Do the same challenges apply to industrial diagnostics, including pharmaceutical and food quality control?**

**PB** — Absolutely! In the industrial field, data bears significant importance for controlling the quality of the food production environment and anticipating possible contaminations — this is what augmented diagnostics is all about. Identical to what we see in the clinical field, manufacturers need to carry out quality tests directly on production lines.

**AM** — Current development in the pharmaceutical industry, around technologies such as messenger RNA vaccines or cell and gene therapies, is giving rise to new diagnostic needs. The tailor-made quality control solutions we provide to these innovative players guarantee patient safety.

## ● DUAL INTERVIEW (END)



**“Corporate Social Responsibility permeates all levels of the organization.”**

**ALEXANDRE MÉRIEUX**

### How does the CSR ambition fit into bioMérieux’s overall strategy?

**AM** — Our activity inherently impacts public health, we have the duty to act as a responsible company. Just like the culture of quality or innovation, Corporate Social Responsibility is an integral part of bioMérieux’s strategy — it permeates all levels of the organization. Our action is based on five pillars: Health, Planet, Employees, Healthcare Ecosystem and Extended Company.

**PB** — Like all companies, we are expected to reduce our environmental impact. bioMérieux is committed to reducing its direct greenhouse gas emissions by 50% (and in absolute value) before 2030, compared to 2019. While at the same time, our sales are expected to show very strong growth. This goal that we have set for ourselves is quite ambitious, and we are really giving ourselves the means to achieve it.

### Philanthropy is another strong focus for bioMérieux...

**AM** — We have always been actively engaged in supporting the most vulnerable populations locally, and taking part in initiatives linked to associations and NGOs. As part of our philanthropic operations, we also support the action of the Mérieux Foundation, which works in low- and middle-income countries to fight infectious diseases and improve the quality of life of populations, in particular by improving access to diagnostic solutions. We encourage our team members to get involved with organizations wherever we operate in the world. The bioMérieux Endowment Fund for education also relies on bioMérieux teams to identify and monitor supported projects. It is a source of pride for our team members.

### What role do team members have in the Company success?

**PB** — Our people are our greatest strength. They show exceptional commitment. We strive to promote diversity within teams, to ensure that each person can develop, and to improve well-being at work. When we upgrade our International Distribution Center in Saint-Vulbas in France, or when we build a new site in Suzhou in China, we invest as much to support the growth of our Company as to improve the quality of life at work for our team members.

### Why is the fight against antimicrobial resistance (AMR) a priority for bioMérieux?

**AM** — AMR is estimated to cause 1.27 million deaths worldwide each year<sup>(1)</sup>. In addition to the human cost, it has an immense economic cost for healthcare systems. Such a “silent pandemic” is largely fueled by the overuse of antibiotics. Diagnostics plays a key role in antimicrobial stewardship (AMS) programs. We have also created AMS Centers of Excellence, in partnership with hospitals around the world, to demonstrate the value of diagnostics in combatting AMR.



**“Our team members are our greatest strength.”**

**PIERRE BOULUD**

(1) Global burden of bacterial antimicrobial resistance in 2019: a systematic analysis, *The Lancet* 2022; S0140-6736(21)02724-0. \*Antimicrobial Susceptibility Testing.



Around a hundred team members will be working in routine production at the Suzhou site.

### Blood culture bottles made in China, for China

In November 2023, after four years of work, manufacturing of blood culture bottles began at our Suzhou site. Production is intended for the Chinese market exclusively. The new facility, located in an area with one of the most dynamic economies in China, is strategic in our effort to

strengthen our leading position in the blood culture market. It is also an important step in fostering our commitment to public health in China, in the field of sepsis diagnostics, and regarding the fight against antimicrobial resistance.

### 13 AMS Centers of Excellence worldwide



Alexandre Mérieux, Chairman of the Board of Directors of bioMérieux, visiting the Tampa Hospital Center (Florida - United States) and AMS Center of Excellence, in October 2023.

As part of a shared commitment to improving antimicrobial stewardship (AMS) and slowing the spread of antimicrobial resistance, we have created AMS Centers of Excellence within partner hospitals already equipped with bioMérieux systems. As of the end of 2023, 13 partnerships were formalized: Chile, China, Colombia, France, India, Italy, Kenya, Malaysia, Morocco, Mexico and the United States (3). Our teams support optimizing diagnostic and advanced analytics integration, laboratory

workflow efficiency, and medical education. In April 2023, an inaugural event in Copenhagen, Denmark, brought together representatives from nine centers. Participants shared their experiences and reflected on their perspectives from advancements already made as part of the partnership. Their feedback was very positive. Moving into 2024, these centers will continue to develop more robust engagement plans, including the potential for collaboration between multiple AMS Centers of Excellence.

# Game Changers for 60 years

**IN 2023, BIOMÉRIEUX PROUDLY CELEBRATED ITS 60<sup>TH</sup> ANNIVERSARY.** A UNIQUE ENTREPRENEURIAL AND SCIENTIFIC ADVENTURE, DRIVEN BY THE LONG-TERM VISION OF THE MÉRIEUX FAMILY AND BY THE CONTINUING COMMITMENT OF OUR TEAM MEMBERS TO PUBLIC HEALTH.

## In 60 years, the progress made by bioMérieux is remarkable!

The small team of about twenty pioneers dating back to 1963 is now a Company with more than 14,000 people worldwide. The intuition we had about the role of diagnostics in the fight against infectious diseases has become a leading bioindustrial reality. Today, in a complex global health environment, diagnostics remains a crucial tool to guide clinicians in managing patient care.

This journey was possible because our family business has always been able to maintain its independence. During all these years, we've been able to take risks, reinvent ourselves, and innovate with the same daring mindset we had when we began, while remaining focused on our long-term vision.

As a result, we made significant acquisitions that bring technological innovation and international development, to continuously lead the fight against infectious diseases. API, Vitek, Organon Teknika, AES, and more recently, Argene and BioFire, have joined bioMérieux, consolidating its positions in bacteriology, instrumentation, and molecular biology. We have conquered new territories: first Europe, then the United States and Asia — contributing to the global fight against infectious diseases.

We have launched a global presence while retaining our French roots, and I am proud that our decision-making centers and a large part of our production and research units remain in France.

Wherever we are in the world, we are moving forward and, beyond our core business, we are providing answers to societal issues that we can no longer ignore.

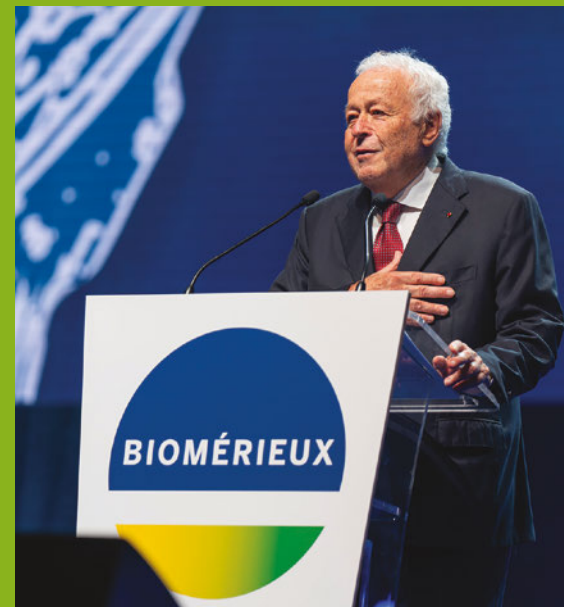
We can do this thanks to the remarkable business and industrial performance of bioMérieux, driven by the commitment of its teams. We can thus provide, through the dividends paid, significant resources to the Mérieux Foundation which fights against infectious diseases in developing countries. This independent family foundation is now present in 17 countries with the network of Rodolphe Mérieux laboratories, true sentinels of infectious diseases on the ground: in Haiti, Lebanon, Mali, Madagascar, to name but a few.

Addressing public health challenges requires biology that is generous and open to the world. Our vision is that of a Pasteurian medicine open to all and committed to the long term. It never changed. It is at the heart of our history, and it defines our future.

**Alain Mérieux**

## 1963

On his 25<sup>th</sup> birthday, Alain Mérieux signs off on the creation of **B-D Mérieux**, a joint venture where the Institut Mérieux and Becton-Dickinson are equal partners.



Alain Mérieux, Founder of bioMérieux, Chairman of the Institut Mérieux.

## 1974

Alain Mérieux takes majority control of the Company, renamed **bioMérieux**.

## 1986

bioMérieux accelerates its development in the world of instrumentation, while strengthening its international presence with the acquisition of **API Systems** in France.

## 1988

By acquiring the world leader in automated bacteriological analysis, **Vitek Systems**, in the United States, bioMérieux plans to develop the **VITEK**® identification and AST system, which is critical to the fight against antimicrobial resistance.

## 1991

Faced with growing food contamination problems, bioMérieux creates an **industrial microbiology** unit to offer quality control tests. After the food industry, the activity extends to the pharmaceutical and cosmetic industries.

bioMérieux launches the first **VIDAS**® kits, an immunoassay range which would become one of the most used in the world.

## 2001

The acquisition of the Dutch company **Organon Teknika** propels bioMérieux to the rank of world leader in blood culture, structures the molecular biology offering, and accelerates international growth.

## 2004

The listing of bioMérieux on the **Paris Stock Exchange** increases the visibility of the family business on the markets, while ensuring its sustainability and long-term development.

## 2011

In France, bioMérieux strengthens its position in industrial microbiology for food applications with the acquisition of **AES**, and in molecular diagnostics for immunocompromised patients with that of **Argene**.

## 2013

Thanks to the acquisition of **BioFire** and its multiplex PCR molecular biology platform, **FILMARRAY**®, in the United States, bioMérieux would become a leader in the syndromic approach to the diagnostics of infectious diseases. The Company establishes its U.S. headquarters in Salt Lake City in 2021.

## 2019

bioMérieux expands its industrial customer base with the acquisition of the American company, **Invisible Sentinel**, an expert in molecular biology for food microbiological control with its innovative **VERIFLOW**® technology.

## 2022

The acquisition of **Specific Diagnostics** in the United States, an innovative company specializing in fast AST solutions, strengthens bioMérieux's global leadership in clinical microbiology and its commitment to the fight against antimicrobial resistance.

# 2023

## Happy birthday bioMérieux!



# A world leader in *in vitro* diagnostics

THANKS TO OUR DIAGNOSTIC SOLUTIONS, WE HELP MAKE THE WORLD A HEALTHIER PLACE FOR THE BENEFIT OF PATIENTS AND CONSUMERS. OUR SYSTEMS, REAGENTS, SOFTWARE AND SERVICES DETERMINE THE SOURCE OF DISEASES – MAINLY INFECTIOUS DISEASES – AND INDUSTRIAL CONTAMINATIONS, MORE SPECIFICALLY FOR THE FOOD AND PHARMACEUTICAL SECTORS.

**45**  
COUNTRIES OF OPERATION

**160**  
SERVED COUNTRIES



**19**  
BIOINDUSTRIAL SITES

**14**  
R&D CENTERS

## OUR 3 KEY TECHNOLOGIES



### MICROBIOLOGY

Culturing biological samples, identifying microorganisms and measuring their antimicrobial resistance.

● *World leader in clinical microbiology and industrial microbiological control.*



### IMMUNOASSAYS

Principle of immunological reaction, to identify or quantify the presence of antigens and/or antibodies in a sample.

● *Specialist in high medical value tests.*



### MOLECULAR BIOLOGY

Detection of genetic DNA or RNA sequences characteristic of a microorganism (bacteria, viruses, fungi and parasites).

● *Pioneer and leader in the syndromic molecular diagnosis of infectious diseases.*

## 2 APPLICATIONS

**CLINICAL**  
**84%**  
OF SALES

Help healthcare professionals to make the right medical decisions for an optimal patient management.

**INDUSTRIAL**  
**16%**  
OF SALES

Support industries in guaranteeing the quality and safety of food and pharmaceutical products.

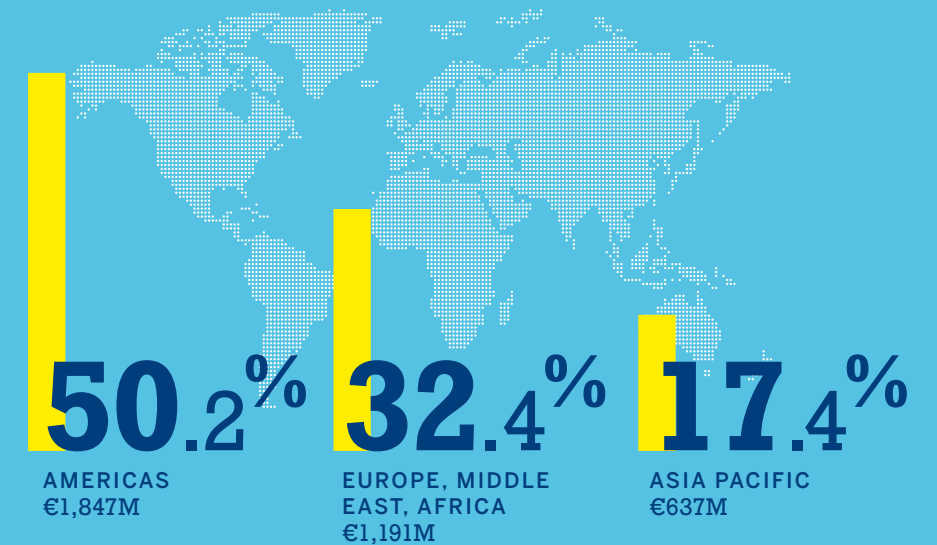
**14,600**

TEAM MEMBERS IN 2023, REPRESENTING **+89%** IN TEN YEARS TIME

**€3,675 M**  
of sales in 2023,  
**+131%** in ten years time

**90%**  
OVER OF SALES OUTSIDE OF FRANCE

## Sales by region\*



\*In % of consolidated sales.



# Challenges

THE WORLD IS MOVING QUICKLY AND SO ARE WE!  
WE DEVELOP SOLUTIONS BASED ON THE EVOLVING  
HEALTH CHALLENGES AND NEEDS OF OUR CUSTOMERS.

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# Testing closest to patients

MORE AND MORE DIAGNOSTIC TESTS ARE CARRIED OUT DIRECTLY WITHIN EMERGENCY DEPARTMENTS OR INTENSIVE CARE UNITS, OR OUTSIDE THE HOSPITAL IN PHYSICIAN OFFICES AND HEALTHCARE FACILITIES. THIS POINT-OF-CARE MARKET IS PARTICULARLY ACTIVE IN THE UNITED STATES. OUR INNOVATIVE BIOFIRE® SPOTFIRE® MOLECULAR BIOLOGY RANGE MEETS THESE NEW NEEDS.



The COVID-19 pandemic has shown the importance of quickly available diagnostic test results in close proximity to the patient. Providing precise, fast and readily-available diagnosis to clinicians to help them choose the most appropriate treatment, and thus improve patient care; that is the challenge of what we refer to as

Point-of-Care (POC) testing. These decentralized tests are carried out as close as possible to the patient, outside the laboratories. In North America, the world's largest healthcare market, the fast development of POC testing is driven by two disparate market forces: consolidation and decentralization.

## .New market dynamics in the United States

First, we see a tremendous amount of consolidation taking hold, as Integrated Delivery Networks or IDNs are growing both vertically and horizontally: there are now just over 900 IDNs controlling over two-thirds of the 5,000 hospitals in the United States. As IDNs consolidate, they continue to adopt the hub-and-spoke model\* to increase efficiency and ensure access to the right level of patient care, centralizing their most complex and intensive procedures while decentralizing routine care to reach patients closer to home.

Jennifer Zinn, Executive Vice President, Clinical Operations, bioMérieux, clarifies: "This trend is driving our customers to consolidate, centralize and standardize decision-making and testing within the IDN, seeking for vendors of choice who can address their needs for the entire continuum of needs within the network. This is causing a shift in our customer buying influences, as the economic buyer has emerged as a key decision-maker." ●

## .A shift towards decentralized testing

In the United States, the COVID-19 pandemic has accelerated the trend to decentralize testing: "Urgent Care and Retail Clinics now number in the thousands. We also are experiencing a surge in standing emergency departments, ambulatory surgery centers and the latest trend: micro hospitals. And while some of the urgent care centers are part of an IDN, many are

independent," explains Jennifer Zinn. These healthcare providers must make diagnostic decisions, even if they lack the technical expertise and/or financial capabilities of large hospital laboratories. This creates a strong demand for new diagnostics solutions tailored to their specific needs and challenges. ●

## .A solution tailored to the Point-of-Care market

To meet this new demand, we have developed and perfected the innovative BIOFIRE® SPOTFIRE® system. We expand our syndromic testing technology outside traditional clinical laboratories to near patient testing locations in or outside of the hospitals, such as emergency departments, intensive care units, urgent care centers, physician offices including pediatricians, and other healthcare facilities directly in contact with patients.

The BIOFIRE® SPOTFIRE® system is a small multiplex PCR\*\* platform that provides healthcare centers with diagnostic results that are as reliable as those delivered by central laboratories.

BIOFIRE® SPOTFIRE® is fast, smart and scalable. "It helps physicians make informed clinical decisions right at the Point of Care to improve patient management: the appropriate treatment can be prescribed during the medical appointment," adds Jennifer Zinn.

Because it perfectly meets the needs of the American market, the BIOFIRE® SPOTFIRE® system was marketed first in April 2023 in the United States "which represents the largest POC market in the world, and the opportunity to bring value to patients in this market is one we couldn't ignore," explains Jennifer Zinn. BIOFIRE® SPOTFIRE® is gradually being launched in other countries around the world, in targeted markets in Europe and Asia. ●

### #EXCLUSIVE

In November 2023, we have strengthened our relationship with McKesson Medical-Surgical, a diversified healthcare services leader, that will be the exclusive distributor of BIOFIRE® SPOTFIRE® Respiratory Solution in the U.S.

### The innovative BIOFIRE® SPOTFIRE® offer

BIOFIRE® SPOTFIRE® is the first PCR system delivering results in less than 20 minutes to be authorized by the Food and Drug Administration (FDA) in the United States. It can run both a large multiplex respiratory test (12 to 25 targets) and a small multiplex respiratory test (3 to 5 targets). BIOFIRE® SPOTFIRE® has also received the CLIA-waiver\*, to be used by non-lab professionals at the Point of Care.

Three tests have received (510)k accreditation from the U.S. FDA, as well as a CLIA-waiver:

- **BIOFIRE® SPOTFIRE® Respiratory (R) Panel**, which detects 15 of the most common pathogens that cause respiratory tract infections;
- **BIOFIRE® SPOTFIRE® R Panel Mini**, which detects 5 of the most common viral causes of upper respiratory tract infections: SARS-CoV-2 (responsible for COVID-19), Influenza A, Influenza B, Respiratory Syncytial Virus (RSV) and Rhinovirus;
- **BIOFIRE® SPOTFIRE® Respiratory/Sore Throat (R/ST) Panel** which detects 15 of the most common bacteria, viruses and viral subtypes responsible for respiratory or sore throat infections.

\* Clinical Laboratory Improvement Amendments.

\* The hub-and-spoke model is used to efficiently manage connections between a central location (the «hub») and various peripheral locations (the «spokes»).

\*\* PCR: Polymerase Chain Reaction.

# Diagnostics for everyone!

AROUND 47% OF THE WORLD'S POPULATION HAS LIMITED OR NO ACCESS TO DIAGNOSTIC TOOLS<sup>(1)</sup>, EVEN THOUGH THESE TOOLS PLAY A KEY ROLE IN THE CONTINUUM OF CARE, ALONG WITH PREVENTION AND TREATMENT. THIS IS WHY WE PARTICIPATE IN INTERNATIONAL PROGRAMS THAT FACILITATE THE PROCUREMENT OF DIAGNOSTIC TOOLS FOR DEVELOPING COUNTRIES, AND WHY WE DEVELOP SOLUTIONS SUITED TO ALL LABORATORY SIZES.

Between 60 and 70% of medical decisions are based on the result of a diagnostic test<sup>(2)</sup>. But these tests need to be accessible! Knowing that not all countries are

equal when it comes to access to health solutions, bioMérieux created the Global Health department 15 years ago.

## .Meeting the “Good Health and Well-Being” goal of the United Nations (UN)

The mission of Global Health is to help laboratories in low- and middle-income countries equip themselves with flexible diagnostic solutions through the use of international funding. Such funding can come from governments, multilateral organizations such as the UN, foundations, non-governmental organizations, or even institutions such as the World Bank. Our common ambition, under the umbrella of the World Health Organization, is to contribute to the UN Sustainable Development Goal (SDG) Number 3: “Ensure healthy lives and promote well-being for all at all ages.”

bioMérieux operates in Africa, Asia, Central Europe, the Caribbean and Latin America. “These public health programs are vectors of innovation because they encourage the arrival of high-tech solutions in countries that could not acquire them through a traditional marketing channel,” says Michel Bonnier, Senior Director Global Health of bioMérieux. “All initiatives in which bioMérieux is involved include actions aimed at giving countries lasting control of diagnostic solutions. We always act collaboratively by promoting the development of health organizations and systems,” adds Gabriel Pedone, Strategic Partnerships Director, Global Health. ●

“We always act collaboratively by promoting the development of health organizations and systems.”

**GABRIEL PEDONE**, STRATEGIC PARTNERSHIPS DIRECTOR, GLOBAL HEALTH



## .Real-life cases in the field

Our partnership with the British government organization Fleming Fund is a flagship example: in 15 countries with limited resources in Africa and Asia, since 2018, we have provided reference laboratories for human and veterinary use with high-tech diagnostic solutions, including VITEK® MS, VITEK® 2 and MAESTRIA™.

In Ivory Coast, we are participating in a multi-year program by the Ministry of Health aimed at strengthening the capabilities of the country's microbiology laboratories.

As such, we have integrated our blood culture, identification and AST\* solutions into 18 new regional hospitals.

Another example: in 2023, we were selected by the Praesens Foundation (Belgium), as part of a project funded by the European Union, to equip six mobile laboratory trucks with FILMARRAY® 2.0 systems, and train their staff. These vehicles will be deployed in Ukraine, Kenya and Senegal, to strengthen molecular diagnostic solutions adapted to the health needs of these countries. ●

A laboratory in Mali equipped with a VITEK® MS PRIME, a bioMérieux mass spectrometer.

\*AST: Antimicrobial Susceptibility Testing.

## VIDAS® KUBE™, A NEW SYSTEM SUITABLE FOR ALL LABORATORIES

Our VIDAS® immunoassay range provides laboratories with universal access to simple, automated and robust technology that delivers fast, reliable results. This analyzer, based on a single test carried out using an all-in-one kit requiring no handling, is today used by 25,000 laboratories in more than 160 countries, making it the most widely used system in the world<sup>(1)</sup>. In 2022, we expanded this range with a new generation system for clinical laboratories and the food industry: VIDAS® KUBE™.

“The objective of VIDAS® has always been to make diagnostics accessible, and VIDAS® KUBE™ perfectly meets this challenge. In Africa for example, where the vast majority of countries are equipped with small laboratories, this modular benchtop analyzer, with a small footprint, has generated great interest since its launch in 2023, both among customers already equipped with VIDAS® and among new customers,” says Stéphanie Bontemps, Senior Director Marketing Africa Region. “Our teams in the field are very committed, and are perfect messengers of bioMérieux's societal mission aimed at facilitating access to diagnostics, even in isolated laboratories.”

VIDAS® KUBE™ is also useful for industrial microbiology food laboratories. It is compatible with existing pathogen detection tests. This instrument meets the need for automation and simplicity, enabling precise results to be obtained on the same day, so as not to compromise the quality of food products.

(1) According to internal market research.



Launch of VIDAS® KUBE™ in East Africa in 2023.

(1) The Lancet Commission on diagnostics: transforming access to diagnostics. Kenneth A. Fleming, FRCP, Prof. Susan Horton, PhD, Prof. Michael L. Wilson, MD, Prof. Rifat Atun, FRCP, Prof. Kristen DeStigter, MD, John Flanigan, MD, et al. [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(21\)00673-5/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)00673-5/fulltext)

(2) Mao X., Huang T. J., Microfluidic diagnostics for the developing world. Lab Chip 12, 1412–1416 (2012).

# Supporting industries in quality control management

FOOD AND PHARMA INDUSTRIES HAVE MORE AND MORE STRINGENT REQUIREMENTS FOR THE SAFETY AND QUALITY OF THEIR PRODUCTION. OUR DIAGNOSTIC SOLUTIONS ARE TAILORED TO MEET THEIR SPECIFIC AND CONSTANTLY EVOLVING NEEDS.

## .An ally in navigating the pharmaceutical challenges

The pharmaceutical sector is undergoing major changes that are challenging the way manufacturers approach the safety and quality of treatments for patients. The landscape demands consistent innovation in preventive and curative therapies to combat life-threatening diseases. This entails collaborating with an expanding array of players, including biotechs, CROs/CDMOs\*, all while upholding supply chain safety and meeting increasingly stringent regulatory demands.

The key industries also need to adapt to new markets, such as biologics or cell and gene therapies, which can lead to new manufacturing challenges with the implementation of complex processes, the digitalization and automation of the entire production workflow, and the need for speed to market.

bioMérieux's ambition is clear: to be recognized as the partner of choice for Smart Pharmaceutical Quality Control to manufacturers around the globe, targeting both patient safety and customer productivity.

Whilst anticipating market trends and the rise of new markets, as well as heavily investing in new science and technologies to respond to emerging pharma industry needs; our integrated offer is designed to adapt to our customers, products and processes, to ultimately provide critical therapies to patients quickly and safely.

We develop rapid, highly accurate methods to reduce contamination risks, boost operations efficiency, facilitate regulatory compliance, and empower smarter, data-driven decision-making. ●

### #PARTNERSHIP

#### Working on Cell Therapy with Accellix

bioMérieux's partnership with Accellix enables us to provide select clients an automated, fast, easy-to-use and standardized flow cytometry solution for the quality control of cell therapies. Unlike traditional solutions, the Accellix platform is well-suited to the manufacturing environment good practices and does not require highly-trained specialists to operate.

Accellix provides manufacturers with quality control scalability to meet the increasing demand for their life-saving cell therapies.



### #INNOVATION

#### For more sustainability in Endotoxin Testing

In our commitment to environmental responsibility, we prioritize sustainability across our operations. Our cutting-edge recombinant factor C (rFC) enzyme technology, an alternative to the horseshoe crabs (limulus) blood harvesting, is at the forefront of endotoxin

testing innovation and embraces the 3R strategy (Reduce, Reuse, Recycle), by helping to reduce waste and minimize plastic usage. Our ENDONEXT™ endotoxin testing range embodies our commitment to a cleaner, sustainable future.

## . Food: A trusted partner in Augmented Diagnostics

With increasing pressure on the supply chain and ever-changing regulations, the food industry is facing considerable challenges. It must simultaneously strive to preserve profit margins, address skills shortages and meet environmental targets. This suggests that production of safe food now requires an entirely new approach, drawing on cutting-edge techniques in laboratory analysis and data processing.

Traditionally, food safety test results are generated in the laboratory and considered stand-alone. More than ever, food safety will no longer rely only on single test results: customers increasingly require actionable information.

Over the past three years, bioMérieux has invested in pioneering next-generation developments in molecular biology, genomics, data science, bioinformatics and digital tools, with the aim of moving away from the simple communication of test results to the production of truly meaningful data and actionable insights for our customers. As a result, our customers are enabled to make better, more informed and faster decisions. Our role is defined in the following vision: "Your Trusted Partner In Augmented Diagnostics."

### DATA & GENOMICS SOLUTIONS AT THE HEART OF OUR APPROACH

Today, final product testing is not enough. With our Data & Genomics offer, composed of innovative pathogen and spoiler investigation tools, we offer solutions to prevent contamination by understanding and turning data into valuable insights. Concretely, we provide monitoring programs for early alert signs, consultancy expertise and leverage the power of genomic tools to even produce tailor-made, new molecular assays.

We support our customers by optimizing their environmental control plan to test better at the right time and at the right step of the process. Hence, low value testing spots are removed, and replaced by an augmented focal vision on the high-risk areas with more dynamic predictive insights for our customers.

Our offer enables to understand and confirm the root cause of a contamination in the factory and take appropriate remedial actions faster. Ultimately, we help our customers to supply safer products and minimize non-quality costs. ●



### #TESTIMONIAL

#### Automating the environmental monitoring

In 2023, Coca-Cola® Bottling Company ECSA approached bioMérieux to implement EnviroMap®. This was one in collaboration with Mérieux NutriSciences. "EnviroMap® allows us to save significant time on routine analysis that is critical for the operation. The tool enables us to obtain more robust information to

make important decisions and helps us to centralize the information efficiently and seamlessly. What we love is that we can get efficient administration and traceability of environmental monitoring, raw material and finished product testing data," explains Pedro Alvarez, ECSA Chile, Plant Manager.

\* CRO for Contract Research Organization; CDMO for Contract Development and Manufacturing Organization.



# Sepsis: A strengthened offer

WHEN SEPSIS IS SUSPECTED, THE PATIENT'S LIFE IS AT STAKE. EVERY MINUTE COUNTS UNTIL THE RIGHT TREATMENT IS ADMINISTERED. OUR LATEST INNOVATION TO MEET THIS CHALLENGE: THE VITEK® REVEAL™ RAPID AST SYSTEM, DESIGNATED AS A "BREAKTHROUGH DEVICE" BY THE U.S. FOOD AND DRUG ADMINISTRATION (FDA).

MORE THAN **75%**  
of bioMérieux R&D investments devoted to the fight against AMR.

Every year, 11 million people worldwide die from sepsis<sup>(1)</sup>, and 1.3 million of these deaths can be attributed to antibiotic-resistant bacteria<sup>(2)</sup>. Defined as life-threatening organ dysfunction, sepsis is caused by an excessive immune response to a serious infection.

Any delay in administering appropriate treatment can therefore be fatal to the patient. To save lives, clinicians must be able to make the right decisions in a very short time, based on fast and accurate diagnostic results. Providing antibiotic susceptibility testing also reduces the burden of antimicrobial resistance (AMR) on a global scale, by supporting the implementation of effective institutional programs for antimicrobial stewardship (AMS).

## .Faster results with VITEK® REVEAL™

The bioMérieux range of solutions to combat AMR and sepsis is one of the most comprehensive on the market. Our diagnostic tests can identify pathogens, detect possible antibiotic resistance, and assess pathogen sensitivity to antibiotic susceptibility.

The acquisition of Specific Diagnostics in 2022 has allowed us to strengthen our offering. The SPECIFIC REVEAL™ Rapid Antibiotic Susceptibility Testing platform was added to our VITEK® range for identification and antibiotic susceptibility testing, and renamed VITEK® REVEAL™. This modular system tests antibiotic susceptibility and delivers actionable results for Gram-negative bacteria directly from positive blood cultures in an average of five and a half hours<sup>(3)</sup>. Therapeutic decision-making is therefore possible on the same day for patients suffering from bacteremic sepsis. ●



## .A global deployment

The VITEK® REVEAL™ instrument has been available on the European market since 2022. It has received CE marking under the In Vitro Diagnostic Directive (for the test panel) and under the In Vitro Diagnostic Regulation (for the instrument). In August 2022, the system was recognized as a "Breakthrough Device" by the FDA, a designation reserved for medical devices that offer significant advantages over existing authorized solutions. The 510(k) accreditation from the FDA will allow sales to be launched in the United States and in countries that recognize this approval. ●

(1) Rudd KE, Johnson SC, Agesa KM, Shackelford KA, Tsoi D, Kievlan DR, et al. Global, regional, and national sepsis incidence and mortality, 1990-2017: analysis for the Global Burden of Disease Study. *Lancet* (London, England). 2020;395(10219):200-11.  
 (2) Murray CJ. Global Burden of Bacterial Antimicrobial Resistance in 2019: A Systematic Analysis. *The Lancet*. 2022;399(10325):629-655. doi:https://doi.org/10.1016/S0140-6736(21)02724-0  
 (3) Tibbetts R, George S, Burwell R, Rajeev L, Rhodes PA, Singh P, Samuel L. Performance of the Reveal Rapid Antibiotic Susceptibility Testing System on Gram-Negative Blood Cultures at a Large Urban Hospital. *J Clin Microbiol*. 2022 Jun 15;60(6):e0009822.

# What happened in 2023

## MAY

● Opening event of a **new warehouse in Mira Loma, California**, for the logistic distribution of reagents in the United States, in addition to the warehouses located in Louisville, Kentucky – already operational – and in Swedesboro, New Jersey, planned for 2024.



## OCTOBER

● First graduating class of **bioMérieux Academy of Microbiology in Latin America**. 300 healthcare professionals from 18 countries participated in this innovative educational program promoting microbiology practice.



## FEBRUARY

● 510(k) Clearance and CLIA-waiver\* provided by the U.S. Food and Drug Administration for the fast and innovative molecular biology system, **BIOFIRE® SPOTFIRE®** (see pages 14-15).

## FEBRUARY

● Launch of the **MAESTRIA™** middleware to optimize microbiological laboratory workflow and improve patient care.

## SEPTEMBER

● Inaugural event of **bioMérieux offices in Lagos, Nigeria**. This subsidiary opened in 2022 is the third of its kind in Africa, after South Africa and Egypt.



## NOVEMBER

● Publication of the **Net Promoter Score (NPS)** attributed by our customers. This recommendation index stands at 47, which is 5 points higher than in 2022.

## NOVEMBER

● Inaugural event to celebrate extension and modernization of our **International Distribution Center (IDC)** in Saint-Vulbas, France. This major logistic site prepares and ships about 5,000 parcels and 300 pallets every day.



## APRIL

● Launch of **BIOFIRE® FIREWORKS™**, integrated software solution for BIOFIRE® systems to optimize laboratory services and support data-driven decisions.

## MAY

● Opening of a new **MySHARE employee share ownership plan**. 40% of the eligible team members worldwide subscribed by acquiring shares on preferential terms.

## OCTOBER

● CE-marking of **VIDAS® TBI (GFAP, UCH-L1)**, a blood test to support assessment and management of patients with mild traumatic brain injury. By limiting the number of CT-scans, this assay helps reduce overcrowding in Emergency Departments since it detects the absence of post-traumatic intracranial lesions.

\* Clinical Laboratory Improvement Amendments. CLIA-waiver allows systems and assays to be used by non-lab professionals at the Point of Care.



# Boosters

INNOVATION IS A MINDSET THAT WE CULTIVATE  
AT ALL LEVELS OF THE COMPANY BY INVESTING  
IN RESEARCH AND EMPOWERING TO DARE.

- **In Depth.** Data Science & diagnostics p.24
- **Innovation.** 2023 key projects p.26
- **InVENTURE.** Innovating through intrapreneurship p.28
- **Investments.** Sites at the forefront of technology p.29

# How Data Science is transforming diagnostics

BROOKLYN NOBLE AND MAXIME BODINIER ARE DATA SCIENTISTS AT BIOMÉRIEUX, SHE IN MOLECULAR BIOLOGY IN THE UNITED STATES, AND HE IN CLINICAL BIOLOGY IN FRANCE. THEY EXPLAIN HOW DATA SCIENCE IS REVOLUTIONIZING DIAGNOSTICS BY GIVING EVEN MORE VALUE TO TEST RESULTS, AND BY IMPROVING PATIENT CARE.

## ● DUAL INTERVIEW

**BROOKLYN NOBLE, PhD,** joined our Data Science department based in Salt Lake City in 2019, where she works on the scientific and medical value of released BIOFIRE® products.

Her main mission is to analyze data provided by BIOFIRE® Syndromic Trends, a global disease surveillance network created by bioMérieux for users of BIOFIRE® panels.



**MAXIME BODINIER** joined bioMérieux as part of a work-study scheme in 2016, before pursuing and completing in 2023 a PhD in our Joint Research Laboratory at the Hospices Civils de Lyon, France (HCL). As part of his new

researcher position in this joint laboratory, highlights of his work include using data from electronic health records to improve medical monitoring, and developing diagnostic IT solutions in close collaboration with clinicians.



## In what way are data/IT science and statistics revolutionizing biology?

**Maxime Bodinier (MB)** — Bioinformatics and biostatistics use tools capable of processing very large and complex volumes of data, for example from DNA sequencing or from measuring gene expression levels. These disciplines help us understand new aspects of living things. In microbiology, they can be used to characterize the diversity and evolution of microorganisms, to decipher their interactions with their environment or with other species, or to discover new molecules of interest. In clinical biology, they can help identify biological or genetic markers associated with diseases or therapeutic responses, to design and evaluate clinical trials. These techniques combine information from very different sources, and are useful for identifying links between data and health risks. This is the notion of predictive diagnostics: preventing rather than curing.

**Brooklyn Noble (BN)** — Bioinformatics and biostatistics have revolutionized molecular biology by providing information that we would not otherwise have been able to obtain and that is not affected by human bias. For example, one of my colleagues recently leveraged bioinformatics methods to better identify adenoviruses using results from the BIOFIRE® Respiratory 2.1 Panel<sup>(1)</sup>. This new taxonomy helps identify the most widespread specific subspecies; it is useful to clinicians and public health decision-makers, allowing them to observe patterns of pathogen circulation, monitor epidemics, and provide information on how diagnostic practices work.

“At bioMérieux, new ideas are always welcomed. Recently, I was encouraged to use machine learning to study diagnostic performance.”

**BROOKLYN NOBLE**  
DATA SCIENTIST, U.S.

## Should we welcome the development of artificial intelligence (AI) or be afraid of it?

**BN** — AI is opening up exciting avenues! It will allow us to develop the next generation of *in vitro* diagnostics, but it has a limitation; it cannot be used alone. In my opinion, we will always need human intervention to monitor, verify, prioritize, and explain.

**MB** — Because it quickly processes multiple and large data, AI has the ability to make everyday life easier. Applied to *in vitro* diagnostics, it will help identify combinations of biomarkers for very complex data, reduce turnaround time, analyze data in real time, generate alerts, or even identify anomalies on colonies in a Petri dish through image analysis... I think we can welcome its development, but we must not allow ourselves to be overcome by a cognitive laziness, which could lead to relying on the machine at the risk of losing a certain level of expertise.

## How do new disciplines linked to data/IT/AI match with traditional biology?

**BN** — The tools linked to data management, information technology and artificial intelligence are useful for better understanding and to further the knowledge of traditional biology, through the use of large databases, sophisticated algorithms, and cloud computing.

**MB** — New disciplines linked to data/IT/AI make it possible to process and interpret massive quantities of biological data, such as the genome or proteins, in a holistic manner. Traditional biology, based on observation and experimentation, can benefit from these digital approaches to widen its knowledge and applications. Thanks to these new data science tools, biological knowledge has made a leap compared to what traditional biology allowed until then.

## In your opinion, what is the most notable latest innovation from bioMérieux related to data/IT?

**MB** — I would say BIOMÉRIEUX VISION SUITE, a set of software solutions that help laboratories turn patient data and the data collected by bioMérieux diagnostic tools into insightful information. It allows us to make the best decisions at the right time for the patient. The acquisition of the Canadian company LUMED at the beginning of 2024 complements this suite, with a clinical decision support system to optimize antibiotic prescriptions and healthcare-associated infections monitoring. This is a real asset to fight against antimicrobial resistance.

**BN** — And I would specifically mention BIOFIRE® FIREWORKS™, which is part of the BIOMÉRIEUX VISION SUITE. This software, launched in early 2023, connects all BIOFIRE® systems together, helping laboratories optimize their workflows and improve self-sufficiency.

## What would be the ultimate revolution that data/IT could bring to medical diagnostics?

**MB** — A real-time diagnostic and advisory system for healthcare professionals (Clinical Decision Support System - CDSS) that would continuously analyze patient data, detect variations, and report any deterioration in health status. By analyzing diagnostic test results in real time, it would detect early signs of illness for timely patient care.

**BN** — A proactive tool, which would make it possible to predict an epidemic before it occurs, and to react before it gets out of control. Additionally, a tool that allows us to generate results without being an expert, which are easy to interpret to facilitate the work of physicians. ●

“I work directly with physicians, pharmacists and biologists, who help me find new ideas, compare my hypotheses and validate my results.”

**MAXIME BODINIER**  
DATA SCIENTIST, FRANCE

(1) A Hierarchical Genotyping Framework Using DNA Melting Temperatures Applied to Adenovirus Species Typing, Ben Galvin, Jay Jones, Michaela Powell, Katherine Olin, Matthew Jones and Thomas Robbins, *Int. J. Mol. Sci.* 2022, 23(10), 5441.

# Some key innovative projects in 2023

## — BioFire Defense engaged with BARDA

In March 2023, BioFire Defense, bioMérieux affiliate and leader in pathogen detection systems for the U.S. Department of Defense, signed a contract with BARDA (Biomedical Advanced Research and Development Authority), a component of the Administration for Strategic Preparedness and Response within the U.S. Department of Health and Human Services. The goal is to speed up the development of the VITEK® REVEAL™ Rapid AST System.



## — Investing in sequencing with Oxford Nanopore

After entering into a partnership with Oxford Nanopore in April 2023, bioMérieux invested £70 million in this British company in October 2023, to support the development of innovative solutions in infectious diseases diagnostics. bioMérieux also acquired 6.9% ownership of Oxford Nanopore, for a total amount of €158m. Oxford Nanopore offers next-generation nanopore sequencing technology, which allows analysis of long fragments of DNA or RNA. This new tool is ideal for the fast, cost-effective characterization of pathogens in clinical samples.

## — Partnership with CIDRAP

bioMérieux has joined forces with the Center for Infectious Disease Research and Policy (CIDRAP), at the University of Minnesota in the U.S., to promote the value of diagnostics in the fight against antimicrobial resistance. In 2023, our partnership resulted in the publication of three research documents, funded by a bioMérieux grant: "Defining the Value of Healthcare Interventions in Antimicrobial Resistance," "Bringing Value to the Care Pathway: The Rising Role of Rapid Diagnostics" and "A Human-Centered Perspective on a Biosocial Problem."



## — Launch of the European biocluster for infectious diseases

bioMérieux is one of the partners of BCF2i, the European BioCluster for Innovation in Infectious Diseases. Supported by the Lyonbiopôle Auvergne-Rhône-Alpes competitiveness cluster, it was the winner of a call for expressions of interest aimed at creating, in France, world-class bioclusters. The BCF2i ambition is to support the development and marketing of innovative solutions to accelerate the fight against emerging infectious diseases and antimicrobial resistance into a One Health approach.



## — Industrial chair on viral respiratory infections

In France, bioMérieux is partner and co-funder — jointly with the Agence Nationale de la Recherche (ANR) — of the REVIDA (REspiratory Vtral infections - from DiAgnosis to prognosis) industrial chair, led by Dr. Sophie Trouillet-Assant. Hosted at Claude Bernard Lyon 1 University (UCBL), within the joint laboratory comprising UCBL, Hospices Civils de Lyon (HCL) and bioMérieux, and launched in October 2023 (see photo), this chair will combine the efforts of the Centre International de Recherche en Infectiologie (CIRI – CNRS / Inserm / UCBL / ENS Lyon), HCL and bioMérieux, to offer effective and innovative diagnostic solutions aimed at improving the care of patients with respiratory infections, as well as strengthening the capacity of health systems to tackle the emergence of new respiratory diseases.



## — Cooperation with the University of Leiden

Faithful to its convictions, bioMérieux continued its innovative and collaborative partnership with the Netherlands Center for the Clinical Advancement of Stem Cell and Gene Therapies (NecstGen). Within this entity, which belongs to the University of Leiden (Netherlands), researchers and manufacturers develop potential cures to previously incurable diseases. bioMérieux provides cutting-edge solutions to monitor quality of products and processes quickly and safely.



## CLINICAL STUDIES TO DEMONSTRATE THE VALUE OF DIAGNOSTICS

The bioMérieux Medical Affairs department manages a portfolio of approximately 200 clinical studies worldwide. This work is carried out according to various models:

- in partnership with international study groups and consortia (e.g.: VALUE-Dx, INHALE, Antibacterial Resistance Leadership Group - ARLG), or with investigators, to whom we provide resources to demonstrate the value of diagnostics in the fight against antimicrobial resistance, sepsis and infectious diseases, including respiratory infections;
- or by bioMérieux directly, as a manufacturer, to strengthen knowledge of our diagnostic solutions.

In all cases, our aim is to document, with evidence or data in real life situations, the efficiency of our solutions at improving patient care. We collaborate with hospitals equipped with the best research units to carry out these studies, the results of which are regularly published in recognized scientific journals.

In 2023, for example, we published a study showing the superior performance of our VIRTUO® solution in terms of reducing result lead times, when characterizing serious infections caused by Gram-negative bacteria<sup>(1)</sup>.

We also support the launch of our new products by conducting studies that illustrate their medical economic value for health systems. This is the case of a study on the cost/effectiveness of the use of blood biomarkers for the diagnosis of mild head trauma, as part of the launch of our VIDAS® TBI test, in comparison with the reference examination, the brain scan<sup>(2)</sup>. Another example: the publication of a retrospective analysis which demonstrates the ability of our BIOFIRE® Joint Infection (JI) panel to detect infectious agents involved in joint infections<sup>(3)</sup>, offering new perspectives for doctors.

(1) Assessment of the impact of centralized bioMérieux BACT/ALERT® VIRTUO® blood culture system (VIRTUO) implementation on outcomes in patients with gram-negative bacteremia, *Diagnostic Microbiology and Infectious Disease*, <https://www.sciencedirect.com/science/article/abs/pii/S0732889323001943>

(2) Cost-Effectiveness of Blood-Based Brain Biomarkers for Screening Adults With Mild Traumatic Brain Injury in the French healthcare Setting, *Journal of Neurotrauma*, <https://pubmed.ncbi.nlm.nih.gov/36267001/>

(3) Performance and Hypothetical Impact on Joint Infection Management of the BioFire Joint Infection Panel: a Retrospective Analysis, *Journal of Clinical Microbiology*, <https://journals.asm.org/doi/10.1128/jcm.00592-23>

# Innovating through intrapreneurship

THREE YEARS AGO, WE IMPLEMENTED AN INTRAPRENEURSHIP PROGRAM CALLED “INVENTURE.” INNOVATIVE CONCEPTS IN ECONOMIC AND TECHNOLOGICAL FIELDS ARE PROPOSED BY BIOMÉRIEUX TEAM MEMBERS. WE GIVE SELECTED TEAMS THE TIME AND MEANS TO WORK ON THEIR PROJECTS.

Innovation is not the exclusive domain of Research and Development. At bioMérieux, it is an entrepreneurial mindset that we cultivate on a daily basis in all

functions, to advance our organization, our working methods and our solutions, in order to serve our public health mission.



Nearly 300 team members submitted a project for the bioMérieux intrapreneurship program.

## .Unleashing creativity

Our intrapreneurship program, launched in 2021, illustrates this culture of innovation. Its ambition is to identify new growth opportunities and improve bioMérieux’s performance, while offering our team members the opportunity to pursue their ideas and achieve personal growth.

The program uses the Design Thinking approach for the ideation phase, followed by the Lean Startup methodology for the proof of concept phase in real-life conditions. The culture of risk and the right to make mistakes are at the heart of the program. The challenge is to leave room for boldness, to unleash the creativity of our teams, and to encourage collaborative innovation. ●

## .Involvement at all levels of the Company

Everyone has the right to have good ideas! The intrapreneurship program is open to all our team members, whatever their function and location, and to all kinds of concepts. Each idea is supported by a team of two to three people.

Team members who are winners of the program are assigned to their project on a full-time basis, for a duration of 3 to 12 months. At the end of that period, a project can lead to the creation of a new product or service, developed internally or externally with the creation of a startup, for example.

The Executive Committee is fully involved in the process: it selects projects, monitors their progress, and decides what action to take at the end of the exploration phase.

Over three seasons, 200 ideas were submitted by nearly 300 team members in 28 countries. Following the selection phase, 18 projects were incubated or are in progress, some of which have already turned into a project or solution. ●

### #BIOVINTAGE

#### A platform imagined by team members

As part of our intrapreneurship program, two team members created a purchasing and resale platform for second-hand bioMérieux instruments (excluding refurbished products). Named bioVintage, this interface aims to secure the second-hand market and enable some laboratories to sell, and others to acquire at lower cost, reliable instruments, and thus extend the lifespan of our systems. Proper operation is certified on site by a field service engineer, and the buyer benefits from a service contract with the bioMérieux subsidiary in the country where they are located.

Incubated in 2022, the project was tested in 2023. For Benoit Rivet and Edward Marks, our team members at the origin of bioVintage, “this entrepreneurial adventure has been quite uplifting: the format allows you to dare and move forward quickly, autonomously. We were able to work with multiple functions of the Company and access the skills of many experts, which is a real opportunity in a professional career.”

# Sites at the forefront of technology

WE CONTINUALLY INVEST TO MODERNIZE OUR SITES AND SUPPORT OUR INNOVATION STRATEGY. MAJOR R&D AND DISTRIBUTION PROJECTS WERE CARRIED OUT IN 2023 IN FRANCE, ITALY AND THE U.S.



### — Florence (Italy)

A new 2,000-m<sup>2</sup> building was constructed on our Italian site, of which more than half is dedicated to our Instrumentation R&D activities. The thirty-some team members on site have creativity spaces, a prototype assembly room, and technical laboratories, including a biology laboratory, a climatic chamber and a semi-anechoic chamber. The latter is a high-tech system that allows in-house pre-testing of instruments for compatibility with electromagnetic radiation, which reduces the development and design time of instruments.

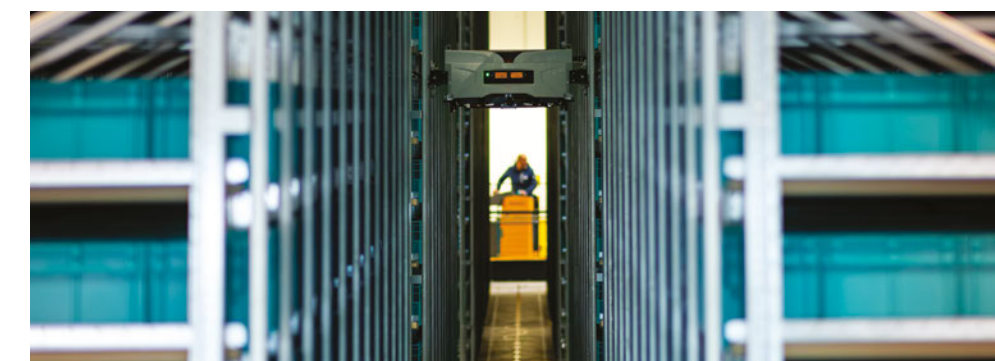


### — San José (United States)

Following the acquisition of Specific Diagnostics, we have decided to buy an extra 4,800-m<sup>2</sup> building to expand our current site in California. This extension will house about 70 team members dedicated to R&D for VITEK® REVEAL™ Rapid AST system. In the original building, manufacturing areas will be expanded to support the sales growth of this system that reinforces our range of solutions to combat antimicrobial resistance and sepsis (see page 20).

### — La Balme-les-Grottes (France)

This microbiology R&D site now features an automated and digitized laboratory that is equipped with advanced technologies in the genomic (sequencing), proteomic (high-resolution mass spectrometry) and phenotypic (culture media imaging and ETEST®) fields. Named LaBNext, this new 2,000-m<sup>2</sup> building hosts 80 people since January 2024. It focuses on microbiological safety and security, housing P2 and P3 laboratories, a secure storage library of some 60,000 microbial strains, laboratory facilities dedicated to mold research, and an independent analytical chemistry laboratory.



### — Saint-Vulbas (France)

As part of the transformation of our International Distribution Center, a new state-of-the-art data system was installed to better meet customer needs and facilitate the management of daily operations. Automation of the site was enhanced by an innovative parcel preparation system, equipped with 12 robots, reducing the physical burden on team members and minimizing the distances they travel. At the same time, the site was expanded by 4,500 m<sup>2</sup> to reach a total surface area of approximately 15,000 m<sup>2</sup>.





# Interactions

AS A CORPORATE CITIZEN, WE ARE AWARE OF OUR  
RESPONSIBILITY TOWARDS THE ENVIRONMENT  
AND ATTENTIVE TO THE NEEDS OF OUR TEAM MEMBERS.

- **Patients.** Working hand in hand p.32
- **Planet.** Mitigating the impact of our products p.34
- **People.** Developing our teams, a priority p.36
- **Solidarity.** Sponsorship & bioMérieux Endowment Fund p.38

# Working hand in hand with patients

WE HAVE MUCH TO LEARN FROM PATIENTS AND THEIR REPRESENTATIVES; AND THEY THEMSELVES WANT TO BE BETTER INFORMED ABOUT THE VALUE OF DIAGNOSTIC TESTS. THIS IS WHY BIOMÉRIEUX IS DEVELOPING ITS COLLABORATIONS WITH PATIENT ASSOCIATIONS AROUND THE WORLD.

In April 2023, we brought together the bioMérieux Global Patient Board for the first time. This new body is made up of representatives of nine patient associations, with which we work in different countries where we are established. "We had them over at our Marcy-l'Étoile and La Balme-les-Grottes sites in France for two days, to explain to them how the in vitro diagnostics industry works, and bioMérieux in particular," points out Arnaud Favry, Senior Director in charge of Patient Value Strategy at bioMérieux. "We also collected comments and recommendations from these associations, helping us place the patient as close as possible to our innovation strategy and operations."



The bioMérieux Global Patient Board met in France for the first time in April 2023.

## .Bringing diagnostics closer to the general public

bioMérieux's Patient Value Strategy, launched in 2021, aims to raise awareness of the value of diagnostic tests among patient associations, that are growing in numbers and increasingly consulted in the health field. We want them to become our partners. "Unlike the pharmaceutical industry, which is in direct contact with the patient, the in vitro diagnostics sector is less known and understood by patients. Strengthening our links with these actors also allows us to raise awareness among the general public of the role that diagnostics plays in certain major health issues that we face, in particular sepsis or antimicrobial resistance," explains Arnaud Favry. ●

## .Making patients' voices resonate internally

Patient testimonials are also powerful levers of engagement for our team members. They allow everyone to take stock of the impact that in vitro diagnostics can have on a healthcare pathway.

For example, Diane Shader Smith, the author whose daughter died of a resistant bacteria infection, testified in front of a thousand people at the annual seminar of U.S. Clinical Applications teams. And Menia Koukougiani, founder of the NGO Karkinaki, Awareness for Childhood and Adolescent Cancer, member of the Health First Europe group of patients victims of antimicrobial resistance, spoke at a ceremony held in honor of our best sales people.

Our goal – with the help of our Global Patient Board – is for each subsidiary to develop local partnerships with patient associations in order to strengthen our collaborations locally. As Arnaud Favry says, "we want patient associations to be our partners in the same way as health professionals. Beyond the testimonials, we intend to involve these associations in the innovation process of our products." ●

## #COMMITMENT

### Joint actions aimed at raising awareness

Working hand in hand with patient associations, we carry out information and awareness actions on public health subjects. For example, we contributed to the creation of an interactive web portal concerning sepsis with the Sepsis Alliance, a U.S. association. Also in the U.S., we have published around ten educational factsheets on gastrointestinal infections, in partnership with the International Foundation for Gastrointestinal Disorders (IFFGD).

In the field of antimicrobial resistance, in 2023 we launched the second session of a fully digital educational program, made up of videos, podcasts, e-book and articles tailored to patients with cystic fibrosis and those around them. This action was carried out jointly with Unidos Pela Vida in Brazil.

9

organizations represented during the 2023 bioMérieux Global Patient Board.

### They attended the first bioMérieux Global Patient Board...



“

It was wonderful to learn more about the company activity and see how their diagnostic tests are created to help patients around the world receive the treatments they desperately need as they fight against infection. Working with other patient representatives was an amazing opportunity.

**CECIEL ROOKER**  
PRESIDENT OF THE INTERNATIONAL FOUNDATION FOR GASTROINTESTINAL DISORDERS (IFFGD)

“

As a sepsis survivor and healthcare professional, I believe that giving the patient a voice is one of the key points in changing the paradigm of sepsis worldwide, and bioMérieux took this initiative through this event. It was extremely enriching to learn more about the role of in vitro diagnostics to combat infectious diseases. Early diagnosis saves lives!

**LETICIA BATISTA**  
MEMBER OF THE INSTITUTO LATINO AMERICANO DE SEPSE (ILAS)



# Thinking about the planet throughout the life cycle of our products



AT BIOMÉRIEUX, WHEN WE TALK ABOUT THE ENVIRONMENT, THE ENTIRE VALUE CHAIN IS CONCERNED: FROM THE INITIAL DESIGN TO THE END OF PRODUCT LIFE, WE STRIVE TO REDUCE OUR FOOTPRINT.

Preserving the planet is one of the five pillars of our Corporate Social Responsibility (CSR) ambition, formalized in 2020. Our approach is global, so that the impact on the environment is taken into account at each stage of our value chain, from our suppliers to our customers: *“The era of focusing solely on the industrial risks on our production sites when we talked about the environment is over. From now on, the environmental issue is the subject of a series of comprehensive plans, and is present in all of our activities and thinking processes.”* explains Bénédicte Blot, Vice President for Global Health, Safety and Environment (HSE).

## .Reducing the impact of our products on the planet

Starting from the research and development phase, our teams work to minimize the impact of our solutions on the environment.

In particular, this involves reducing the use of harmful or polluting chemical substances in our products, introducing recycled materials into our packaging, seeking solutions to optimize the lifespan of our systems, or designing instruments with lower energy consumption. As such, more and more bioMérieux equipment incorporates eco-design features, such as the sleep mode on our VIDAS® KUBE™ immunoassay system, which allows savings of up to 52% in electrical power consumption.

Also upstream of the value chain, we involve our suppliers in the fight against climate change. By the end of 2023, thanks to our efforts, nearly 80 suppliers representing 38% of Scope 3\* greenhouse gas emissions, had joined the Science Based Targets initiative (SBTi) to reduce their CO2 emissions. Our goal is to reach nearly 70% by 2026. ●

\* Scope 3 emissions represent the emissions from purchases of goods and services, shipping, withholding energy production, business travel, and employee commuting.

## .Reducing our own energy consumption

In terms of energy saving, we have three priority objectives.

- Energy sobriety, because the best energy is that which we do not use. In France, the energy crisis of 2022 compelled us to accelerate this energy saving drive, by reassessing our essential needs, by lowering temperatures in buildings, or by reconsidering our needs for air renewal in production.
- Energy efficiency, by investing in innovative solutions to meet our needs. In all of our French sites, we are deploying waste heat recovery projects aimed at significantly reducing our energy consumption. The same type of approach is under evaluation on our U.S. sites.
- Development of renewable energies, which emit less greenhouse gases. In 2023, these represented 21% of our consumption. A figure which should increase rapidly thanks to work-in-progress installations at our sites in Marcy-l'Étoile, Combourg, Craponne and Saint-Vulbas in France, as well as Florence in Italy. In addition, we are setting up contracts for the supply of electrical power from renewable sources in countries where this is possible, such as in the U.S. in 2022 with Ameren Missouri, or in France in 2023 with TSE.

At the same time, we are also working on ambitious plans to reduce our water needs. In Brazil, at our Rio de Janeiro site, the cooling water from the culture medium tanks is reused in another stage of production, via a fully automatic closed circuit system. As a result, more than 3,200 m³ of water are saved each year. ●

On all our sites around the world, like in Rio, Brazil here, we are committed to minimizing our environmental impact.

## .Optimizing shipping and the end of life of our products

To limit CO2 emissions linked to the shipping of our finished products, we are reducing the use of air freight in favor of sea shipping for destinations where delivery by land is not possible. In 2016, air freight amounted to more than 95% compared to 5% for sea shipping. In 2023, the trend has clearly reversed: ship-based transportation now makes up two thirds of the volume! We also favor the purchase of biofuels (based on organic waste) for sea shipping of our finished products, in accordance with the European RED II directive. Thanks to this provision, the emission of 1,600 tons of CO2 has been avoided in 2023. Other transportation modes are being tested, such as river transportation in France on the Rhône between our International Distribution Center (IDC) in Saint-Vulbas and the port of Fos-sur-Mer.

Another lever to lower the quantities transported is to reduce the size and weight of our parcels. Several of our product ranges benefit from new packaging formats. At the IDC, new equipment installed in 2023 to optimize the filling of parcels should reduce the carbon footprint of our shipments by 10 to 15%. This also involves product innovations. For example, we are developing dehydrated culture media, in partnership with Mérieux NutriSciences, aiming to cut by 20 the carbon footprint of their shipping and save energy on storage at temperature of their products. Finally, we encourage our customers to group their orders to limit the number of shipments, as part of a pilot project in France.

We are working to reduce the volume of our packaging to decrease our greenhouse gas emissions.



# 3,090

team members worldwide trained through the Climate Fresk as of the end of 2023.

At the end of the value chain, we work to extend the life of our products. Some team members had the idea of creating a platform for purchasing/selling pre-owned instruments (see page 28). In the U.S., we are conducting a pilot project with a service provider who dismantles some of our instruments in order to give a second life to their parts and components. This operation has already prevented the disposal of five tons of waste. Reuse also applies to our boxes, such as in India, where our subsidiary reuses packaging boxes from the IDC for shipments to its customers.

*“We have already implemented numerous initiatives and we continue to make progress,”* concludes Julien Dulieu, Health, Safety and Environment (HSE) Manager. *“Every function in the world has a role to play! We have set ambitious goals for ourselves for 2025 or even 2030, and together we are already thinking beyond.”* ●



## Our team members are committed

At our sites, team members have set up groups on their own initiative to make concrete actions in consistency with bioMérieux’s CSR engagements. As an example, the “Iberia Well&Green” team is active in Spain and Portugal since 2021. About 40 volunteer people, which represent more than 15% of local team members, are engaged in three workstreams: Planet, People and Prosperity. The team evolves every year following a call for applications and the roadmap is built collectively, drawing on a survey conducted among team members in Iberia.

# The development of our team members, a priority

TRAINING SESSIONS, EDUCATIONAL MEETINGS, FEEDBACK CULTURE, ENGAGEMENT PROGRAMS... AT BIOMÉRIEUX, WE USE VARIOUS LEVERS TO HELP OUR 14,600 TEAM MEMBERS DEVELOP THEIR KNOWLEDGE AND SKILLS. THIS YEAR, WE FOCUSED OUR EFFORTS ON SOFT SKILLS, AS WELL AS ON DIVERSITY AND INCLUSION (D&I).

## .Relying on our team members' voice to move forward

In 2022, we launched the "Voice of Employee" program internally on the following foundations: listening to our teams, understanding their expectations, and acting to strengthen their commitment. We want each team member, in their uniqueness, to feel free to express their needs and make proposals to improve the employee experience at bioMérieux.

Following a survey conducted worldwide, we have identified the sources of motivation for our team members, but also the areas in which they want improvements. In 2023, we began working on workload management, and on finding ways to encourage team members to share their opinions more freely. Through publications on our intranet, we have shared useful information and resources to help our team members act daily on these topics. In addition, informative and collaborative webinars were held for managers to support them in activating those levers within their teams. ●

## .Developing soft skills

We also ensure the growth of our team members' soft skills, and in particular the ones corresponding to our bioMérieux's mindset. Such skills are highly sought after by companies as they foster both collaboration and performance.

In this area, we encourage a feedback culture between manager and team members, but also between team members as peers. In 2023, we implemented an initiative enabling our team members to get feedback upon their own soft skills from colleagues they solicited: for example, about showing emotional intelligence, demonstrating adaptability, as well as initiating actions. Feedback allows for better self-awareness; it aims to leverage strengths and work on areas of improvement. Depending on the feedback received, any team member can create, with their manager, a development plan adapted to their needs in particular by utilizing the training catalog provided by Mérieux Université, the corporate university of Institut Mérieux. ●

## .Increasing knowledge of inclusive behaviors

With our commitment of creating a safe work environment, we raise awareness and train our teams on topics related to diversity and inclusion. We are convinced that companies that prioritize inclusion are more innovative and more efficient, and believe that inclusion is the responsibility of everyone, at all levels of the organization.

We decided to raise awareness and train top management as a priority, because they embody the bioMérieux mindset and are responsible for creating an engaging work environment. In addition, the relationship that the team member maintains with their manager is fundamental; it is the driving force of their psychological safety and success at work. In May 2023, all members of the Executive Committee completed training entitled "Making Inclusion Real." In this session, they reflected on core concepts to understand when prioritizing inclusion, core traits of inclusive leaders and developed a personal inclusive leadership plan. Our ambition is to extend training to all top management, then to all managers and finally to all team members, in partnership with Mérieux Université.

At the end of 2023, a webinar entitled "Inclusion for All" was offered to all bioMérieux teams to develop and consolidate their knowledge on this topic, understand how our prejudices can be an obstacle to inclusion, and realize that emotional intelligence can help to drive inclusive behavior. This webinar served as a reminder that each person must be able to evolve in a safe working environment, while being respected and welcomed with their differences. ●



### #TALENTS

5.23% of our French team members are work-study employees. By going beyond the legal minimum requirements, bioMérieux illustrates its commitment to support talents' training and development, to offer equal opportunities through work-study and internship, and make the *in vitro* diagnostic industry better known.

### PAULA CABOT

joined bioMérieux Argentina as a receptionist in 2000. As our subsidiary grew, she worked her way up to management positions in Latin America (Supply Chain, Shared Services Center, Customer Service) until becoming General Manager for bioMérieux Argentina in 2019.



*As leaders, we have a great responsibility to continuously improve ourselves, focusing on our soft skills, which are key to lead empowered teams capable of achieving challenging goals in complex environments. bioMérieux creates the right conditions for growth: I really enjoyed the leadership programs I followed, and I was fortunate to be supported in pursuing a Master Degree in Business Administration, which helps me a lot in my current position.*



Training in 2023 at bioMérieux:

**322,000**  
hours provided

**23**  
hours per team member

**94.5%**  
completion rate



### BART VAN DEN BRAND

joined bioMérieux in 2005. He started as Quality Director in the Netherlands, then held several positions, also in the Quality field, in France and the United States, before being appointed Senior Vice President, Site Operations, Americas, in 2022.

*I have been fortunate to participate in several development programs. They allow you to create and maintain a network of colleagues around the world, and to adapt and accept differences, which has been essential in my career. The challenge for bioMérieux is to be sufficiently agile to adapt programs over time, and I am proud that Human Resources involves us to contribute to change management.*



# In solidarity with the populations around us

THROUGH OUR SPONSORSHIP ACTIVITIES, WE SUPPORT SOCIAL AND CULTURAL INITIATIVES IN THE COUNTRIES WHERE BIOMÉRIEUX OPERATES, AND IN PARTICULAR, WE HELP THE MOST VULNERABLE POPULATIONS.

Philanthropy plays an important role in our societal commitment. bioMérieux's sponsorship operations serve three main causes: improving health around the world, through support of the Mérieux Foundation, the fight

against inequalities, and access to culture. Specifically, we financially support local associations, as well as non-governmental organizations (NGOs), over the long term, and we encourage our team members to volunteer.

## .Our teams get involved around the world

In 2023, our teams were particularly committed to the fight against inequalities, by participating in numerous charitable actions in support of vulnerable people. In France, in the Lyon region, thanks to the support of bioMérieux, nearly 300 volunteer team members took part in activities, during their working hours, at the Escales Solidaires. These participatory spaces were created by the Habitat et Humanisme association to weave social ties between residents and isolated or deprived persons, around shared meals. "bioMérieux people provide stability to our teams by ensuring that two people per session are present in time slots where we do not have many volunteers. They bring great momentum through their presence and commitment by preparing meals for the beneficiaries," says Morgane Caire, in charge of partnerships at Habitat et Humanisme.

In Italy, in November, 116 bioMérieux team members gathered to prepare boxes of shelf-stable food in support of the Rise Against Hunger association, committed to eradicating hunger in the world. More than 850 boxes were packaged and delivered to the Red Cross of Florence to be distributed to Tuscan families.

In the U.S., our teams based in Durham, St. Louis and Salt Lake City made donations to local food banks in November, distributed holiday gifts to families, and hygiene kits to homeless people. Other examples of the commitment of our U.S. team members: a clothing collection drive was set up by employees on the Saint Louis site, and the International Business Software team in Salt Lake City participated in a donation initiative set up by the local television channel KSL TV in favor of a children's hospital in Utah. ●



The equivalent of 10 trucks full of clothes were collected thanks to the donation bin set up by our team members in Saint Louis, U.S., in July 2023.



Two bioMérieux team members prepare and distribute meals to beneficiaries of the Escales Solidaires, in the Lyon region.

NEARLY **6**

million euros distributed by bioMérieux in 2023 as part of its sponsorship activities.

### #FOUNDATION

bioMérieux donated nearly 2.4 million euros to the state-approved Mérieux Foundation, an independent family foundation, which fights against infectious diseases in countries with limited resources.

# 18 new projects for our Endowment Fund

THE BIOMÉRIEUX ENDOWMENT FUND FOR EDUCATION WAS CREATED IN 2020 TO FUND PROJECTS THAT PROMOTE EDUCATION OF YOUNG DISADVANTAGED CHILDREN, RELYING ON THE INVOLVEMENT OF BIOMÉRIEUX TEAM MEMBERS.

The bioMérieux Endowment Fund for Education is a non-profit organization. What is its mission? Working for equal opportunities by reducing inequalities through and in education. Each year, it launches a call for projects in order to select new initiatives aimed at early childhood (0-8 years) in the countries where bioMérieux operates.

In 2023, 18 new projects were selected in nine countries; they will be funded by the Endowment Fund to the tune of €2.45 million over three years: Belgium, France (5 projects), Italy, Ivory Coast, Kenya (3 projects), Mexico, Nigeria, the Philippines and the U.S. (4 projects). These initiatives include the construction of schools, education of sick children, and support for autistic children and their families.

Our team members play a key role in the operation of the Endowment Fund. They identify associations in their region and invite them to apply. They also have the opportunity to become project managers and follow the association they support; for this, bioMérieux allows them to use up to six days of their working time. Our team members can also be occasional volunteers. Finally, the Endowment Fund has representatives from bioMérieux teams in each region of the world. ●



The Children of the Mekong association in the Philippines is supported by the bioMérieux Endowment Fund.



Since 2020, the bioMérieux Endowment Fund for Education in numbers:

**47** projects supported

**23** countries of operation

**€6.8M** allocated (approx.)

**66** bioMérieux team members committed year-round and more than 500 one-off volunteers

## Arca do Saber brings smiles to the faces of children in São Paulo

The Arca do Saber association, which provides educational activities to underprivileged children in the Vila Prudente favela in São Paulo, has been supported by the bioMérieux Endowment Fund since 2021.

"Our partnership with the Endowment Fund was a milestone in the development of Arca do Saber and in the support provided to our beneficiaries," underlines Thais Alves Maximino, President of Arca do Saber. "Following an unprecedented health crisis and a long lockdown period, we were able to invest in educational innovation, in order to form a team and give back the desire to learn to the children. The bioMérieux Brazil team of local volunteers is very supportive: They closely follow our project, suggest ideas and participate in activities, while raising awareness of our cause among other employees."

Viviane Dias, Marketing Communications Supervisor at bioMérieux Brazil, is one of the team members in charge of the partnership with Arca do Saber. She attests of the direct impact on young children: "I am very proud that bioMérieux Brazil team members are involved in this association. I would like to thank them for their support on the projects that we conduct to the delight of children, on Children's Day or during the Easter and Christmas holidays, for example. What joy to see that our collective actions can have a real impact on these young children!"

The background of the page is a photograph of three Trojan horses, which are large, dark, metallic sculptures of horses. They are standing in a grassy park area. In the background, there are trees with vibrant autumn foliage in shades of orange, yellow, and brown. The scene is framed by out-of-focus leaves in the foreground, creating a sense of depth and a natural setting. The sky is a clear, pale blue.






# Directions

OUR NON-FINANCIAL AND FINANCIAL PERFORMANCE  
REFLECTS OUR ENGAGEMENT, AS WELL AS THE  
LONG-TERM STRATEGY SUPPORTED BY OUR GOVERNANCE.

- **Indicators.** Non-financial and financial performance **p.42**
- **Governance.** Board of Directors  
& Executive Committee **p.46**

# Non-financial performance

## .CSR Roadmap

 <p><b>HEALTH</b></p> <p><b>+30%</b> of patient results<sup>(1)</sup> supporting AMS by 2025</p> <p><b>+16%</b> *</p> <p><b>≥80%</b> of antibiotics addressed by our AST solutions<sup>(2)</sup></p> <p><b>EUCAST 91%</b> * <b>CLSI Tier I to Tier IV 92.3%</b></p>	 <p><b>PLANET</b></p> <p><b>-50%</b> absolute GHG emissions in 2030 vs. 2019, in scopes 1 &amp; 2</p> <p><b>-2.7%</b> *</p> <p><b>-45%</b> water consumption<sup>(3)</sup></p> <p><b>-50%</b> energy consumption<sup>(3)</sup></p> <p><b>-50%</b> waste generation<sup>(3)</sup></p> <p><b>Water: -41%</b> * <b>Energy: -40%</b> * <b>Waste: -53%</b></p>	 <p><b>EMPLOYEES</b></p> <p>Lost Day Incident Rate <b>+2 to 0.6</b> in 2025 vs. 1.2 in 2020</p> <p><b>1.71</b> *</p> <p>Corporate leadership team in 2025<sup>(4)</sup></p> <p><b>&gt;40%</b> women</p> <p><b>&gt;35%</b> international profiles</p> <p><b>38% women</b> * <b>32.4% international profiles</b></p>	 <p><b>HEALTHCARE ECOSYSTEM</b></p> <p>Collaboration projects with <b>patient associations</b> in 2025 vs. 2021</p> <p><b>x 2</b></p> <p><b>Materiality assessment updated every 3 years</b></p> <p><b>Materiality assessment initiated in 2023</b></p>	 <p><b>EXTENDED COMPANY</b></p> <p><b>≥1%</b> of net income attributable to the parent company dedicated to <b>philanthropy</b> (Endowment Fund excluded)</p> <p><b>1.61%</b> *</p> <p>Provide CSR training by 2025 to <b>distributors</b> representing <b>55%</b> of indirect sales<sup>(5)</sup></p> <p><b>21%</b> *</p>
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(1) 2019 estimate: 183 million results.  
 (2) At least 80% according to the EUCAST list, 90% according to the CLSI Tier I to Tier IV list.  
 (3) Per million euros of sales, in 2025 versus 2015.  
 (4) Members of the Executive Committee and N-1 with a global role (international profiles are defined as non-French).  
 (5) Sales realized through the distributors network.

\* Results end of year 2023.

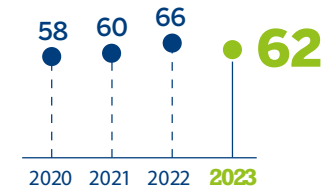
## .Sustainable Development Goals of the United Nations



Our CSR strategy supports in particular five Sustainable Development Goals (SDGs) of the United Nations. We are fully in line with bioMérieux's commitment to the United Nations Global Compact, which has been renewed each year since 2003.

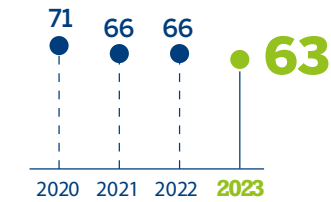
## .Main non-financial indicators

**GHG emissions<sup>(1)</sup>**  
(in thousands of tCO<sub>2</sub>e)

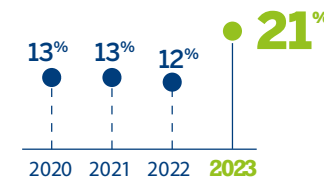


(1) Scopes 1 and 2 greenhouse gas emissions in absolute value.

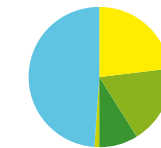
**Total energy consumption in relation to sales**  
(MWh per million euros)



**Percentage of energy consumption from renewable sources**

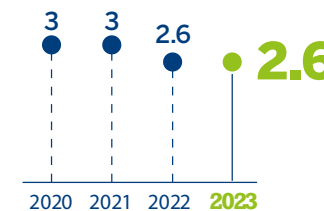


**The spread of renewable sources in 2023**

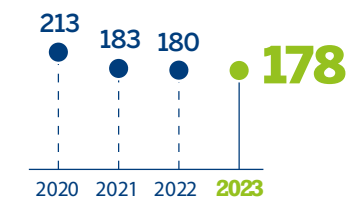


- 49% Guarantee of Origin Certificates - Hydroelectricity
- 23% Guarantee of Origin Certificates - Sustainable biomethane
- 18% Guarantee of Origin Certificates - Wind Power
- 9% On-site solar panels
- 1% Guarantee of Origin Certificates - Solar

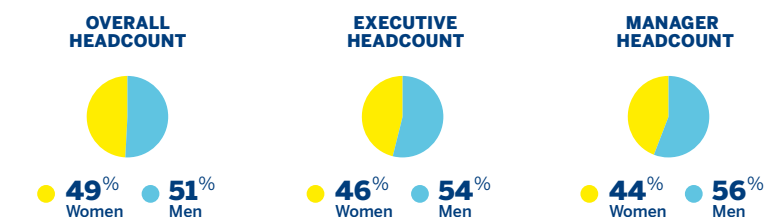
**Waste production compared to sales**  
(Metric tons per million euros)



**Water consumption (all sources) in relation to sales**  
(m<sup>3</sup> per million euros)



**Gender breakdown of manager and team manager headcounts**



## .Indexes and labels

Non-financial rating agencies have been evaluating the CSR performance of bioMérieux and have included it in their socially responsible capital expenditure indices.

- FTSE4Good**  
June 2023  
Renewal of our certificate of inclusion on the index
- Gaia Rating**  
October 2023  
Score 84/100
- CDP Disclosure Insight Action**  
December 2023  
Score C
- Vigeo Eiris**  
September 2023  
No. 1 in our sector  
60/100
- EcoVadis**  
January 2024  
Score 78/100 – Gold  
Top 5% of assessed companies
- Gender Equality Index**  
March 2023  
Score 93/100
- Dow Jones Sustainability Index**  
September 2023  
Score 70/100
- Feminization of SBF 120 management bodies**  
November 2023  
N° 69/120  
Score 66/100

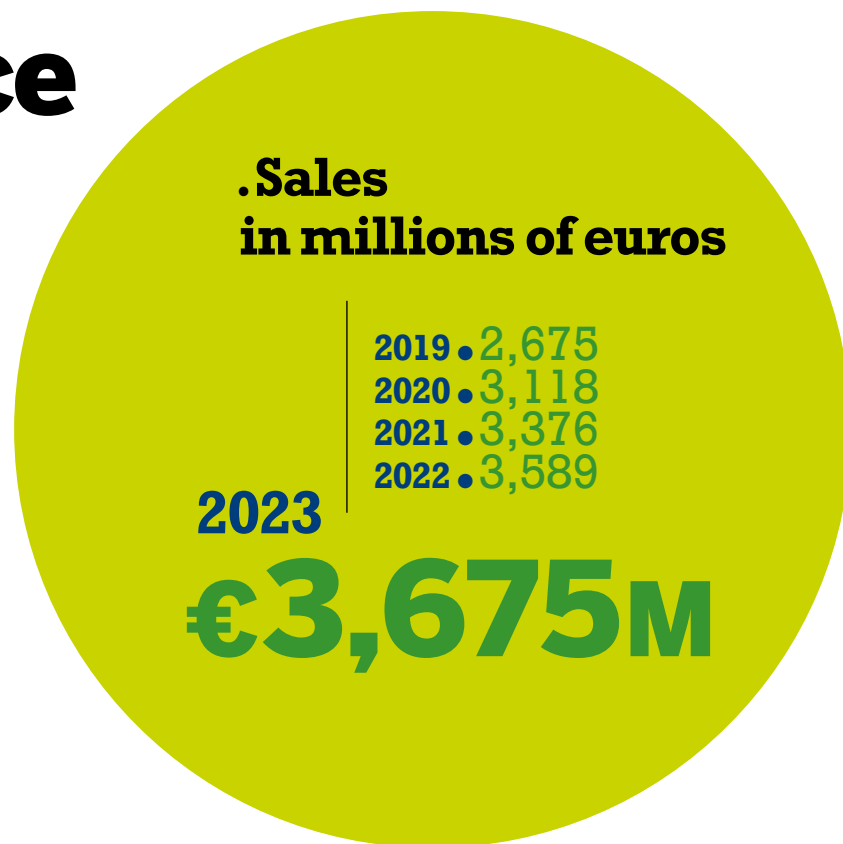
## .Recognition

- Science Based Targets initiative (SBTi)**  
November 2021  
Approval of the road map to 1.5°C

# Financial performance

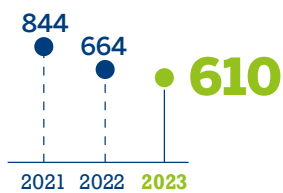
IN 2023 BIOMÉRIEUX DELIVERED A VERY SOLID OPERATING PERFORMANCE IN A POST COVID ENVIRONMENT. OUR SALES EXCEEDED EXPECTATIONS AND OUR CONTRIBUTIVE OPERATING INCOME STOOD IN THE HIGH END OF THE GUIDANCE.

The activity of the year showed a remarkable performance of BIOFIRE® non-respiratory panels, an outstanding growth in microbiology driven by VITEK® and BACT/ALERT® ranges, the promising launch of BIOFIRE® SPOTFIRE® and a strong dynamic for the industrial applications.

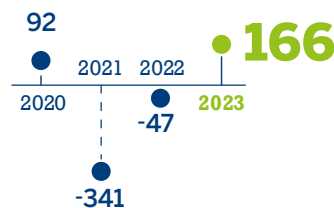


## .Financial indicators

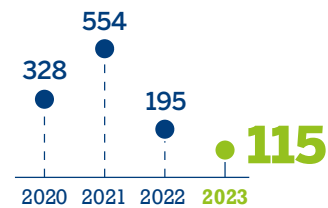
**Contributive operating income before non-recurring items<sup>(1)</sup>**  
(in millions of euros)



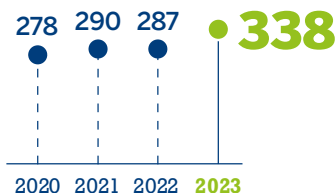
**Change in net debt**  
(in millions of euros)



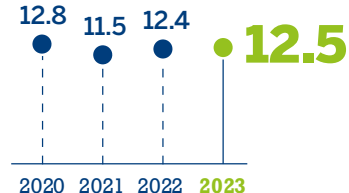
**Free cash flow<sup>(2)</sup>**  
(in millions of euros)



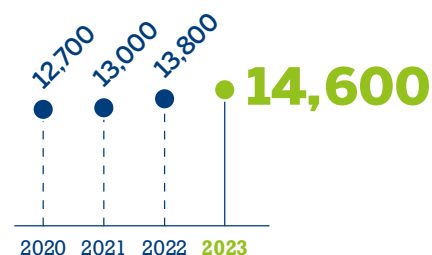
**Investments**  
(in millions of euros)



**R&D expenses**  
(as a % of revenue)



**Headcount at December 31<sup>(3)</sup>**



(1) Following the acquisition of Specific Diagnostics, the Company decided to change the presentation of its financial statements so that all amortization and impairment of intangible assets related to acquisitions, plus all costs related to those acquisitions, would now be grouped into a single dedicated line item in the profit & loss statement. This line is called "amortization and impairment of intangible assets related to acquisitions and acquisition-related costs" and sits under contributive operating income before non-recurring items. The data in the above table have been restated for this new rule for fiscal years 2021 and 2022.

(2) Cash flows from ordinary operations, net of capital expenditure needed to maintain or enhance production.

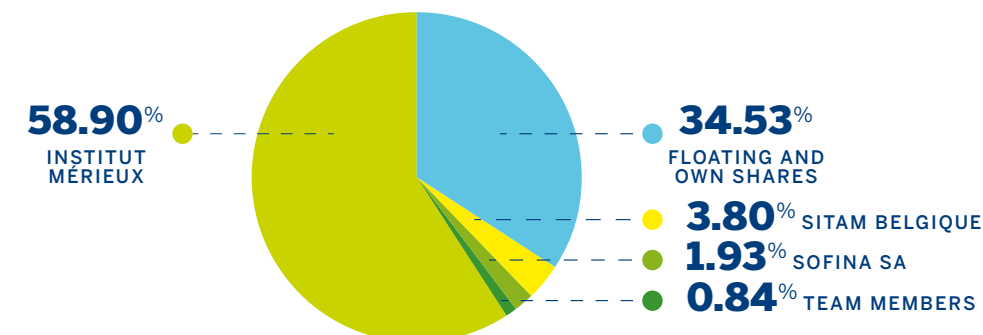
(3) In full-time equivalent, including temporary employees.

## .Change in bioMérieux share price during 2023\*



\* In euros compared with benchmark indices.

## .Breakdown of capital as of December 31, 2023



### The bioMérieux share

bioMérieux shares have been traded publicly since July 6, 2004 in the CAC Mid 60®, SBF 120®, CAC Mid & Small®, CAC All-tradable® and CAC All-Share® French market indices. In addition, bioMérieux has been included in new indices since 2017, specifically MSCI France Index and STOXX® Europe 600. The Company's shares are listed on compartment "A" of the Euronext market and are eligible for deferred settlement service (Service de Règlement Différé – SRD).

bioMérieux's social, Corporate and environmental commitment has been recognized for a number of years by non-financial rating agencies.

At the end of December 2023, the closing rate for the bioMérieux share was €100.60 (€97.92 at the end of December 2022), and bioMérieux's market capitalization was €11.9 billion. In 2023, 23,129,880 of the Company's shares were traded on Euronext compared with 30,086,616 in 2022.

(source : Thomson Reuters Eikon)



# Committed Governance



## . Board of Directors

At December 31, 2023

### The main skill sets of Board members

The Board of Directors benefits from the varied, complementary skills of the individuals who serve on it:

- Governance
- International experience
- Executive management of major groups or listed companies
- Strategy / M&A
- Finance / audit
- Health sector
- R&D / innovation
- CSR
- Digitalization

1. **ALEXANDRE MÉRIEUX** Chairman of the Board of Directors <sup>(a)</sup> / 2. **PHILIPPE ARCHINARD** Non-independent director <sup>(a)</sup> <sup>(b)</sup>  
 3. **JEAN-LUC BÉLINGARD** Non-independent director <sup>(a)</sup> <sup>(c)</sup> / 4. **HAROLD BOËL** Independent director <sup>(a)</sup> <sup>(b)</sup>  
 5. **MARIE-HÉLÈNE HABERT-DASSAULT** Independent director <sup>(a)</sup> <sup>(c)</sup> / 6. **MARIE-PAULE KIENY** Independent director <sup>(a)</sup>  
 7. **FANNY LETIER** Independent director <sup>(a)</sup> <sup>(b)</sup> <sup>(c)</sup> / 8. **SYLVAIN ORENGA** Director representing employees <sup>(a)</sup> <sup>(c)</sup>

(a) Strategy Committee. (b) Audit Committee. (c) Human Resources, Compensation and CSR Committee.

**59 years old**  
Average age

**8**  
Members

**4**  
Independent directors

**1**  
Employee director

**96%**  
Attendance rate on Board

**3 women**  
or 43%<sup>(1)</sup>

**10.5 years**  
Average term of office

(1) Pursuant to Article L. 225-27-1 of the French Commercial Code (Code de Commerce), the percentage of female directors is calculated without including the director representing employees.

## . Executive Committee

At March 1, 2024

The Executive Committee is responsible for implementing the Company's general strategy validated by the Board of Directors

The committee is responsible for overseeing strategic projects, deciding on priorities and implementing the necessary resources within the Company's various departments, such as deciding on significant capital expenditure.

It also reviews the Company's operations, regulatory and quality situation, financial position, sales, headcount and major projects. It meets every month.



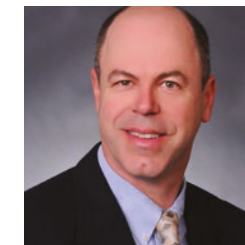
**Pierre Boulud**  
Chief Executive Officer



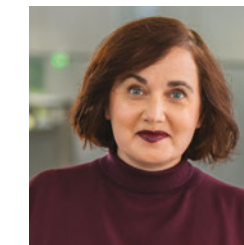
**Guillaume Bouhours**  
Chief Financial Officer, Executive Vice President, Purchasing & Information Systems



**Pierre Charbonnier**  
Executive Vice President, Global Quality, Manufacturing & Supply Chain



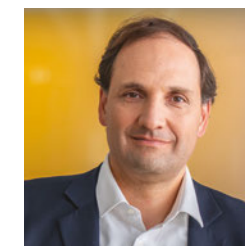
**Charles K. Cooper**  
Executive Vice President, Chief Medical Officer



**Audrey Dauvet**  
General Counsel, Executive Vice President, Legal, Corporate Integrity and Public Affairs



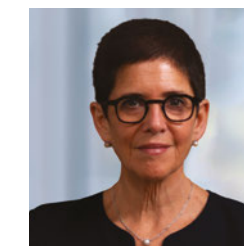
**Valérie Leyldé**  
Executive Vice President, Human Resources, Communication and CSR



**Yasha Mitrotti**  
Executive Vice President, Industrial Applications



**Céline Roger-Dalbert**  
Executive Vice President, Research & Development



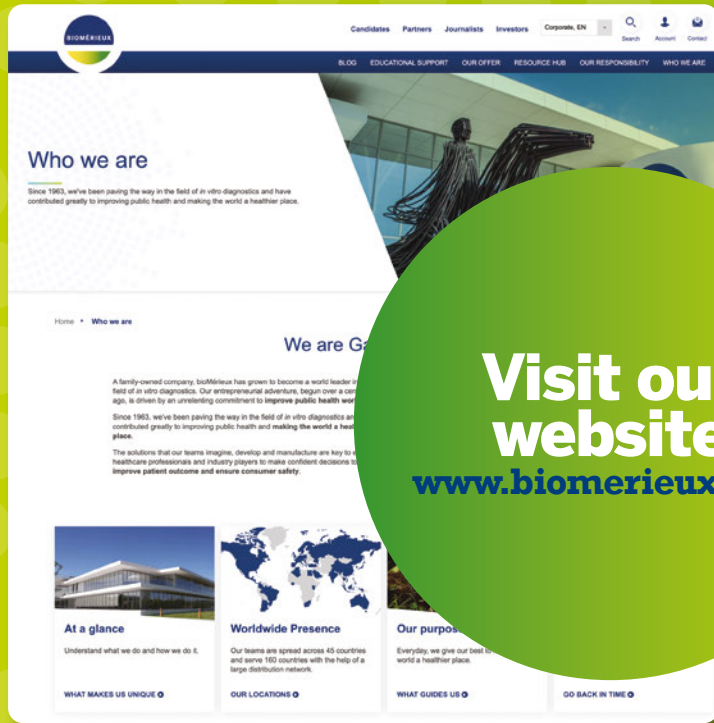
**Jennifer Zinn**  
Executive Vice President, Clinical Operations

## Evolution of governance

Since July 1, 2023, Alexandre Mérieux has served as Chairman of the Board of Directors and Pierre Boulud as Chief Executive Officer of bioMérieux. In the following months, further changes took place within the Executive Committee. On August 1, 2023, Jennifer Zinn succeeded Pierre Boulud as Executive Vice President, Clinical Operations. Effective January 2, 2024, Dr. Charles K. Cooper was appointed Executive Vice President, Chief Medical Officer, and effective March 1, 2024, Céline Roger-Dalbert was appointed Executive Vice President, Research & Development, following the retirements of their respective predecessors, Dr. Mark Miller and François Lacoste.



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