



# 2020 ANNUAL REPORT



PIONEERING DIAGNOSTICS

# bioMérieux, a family commitment to combat infectious diseases



bioMérieux is first and foremost a human and scientific adventure that began more than 55 years ago.

Our expertise and our commitment to expand the frontiers of knowledge in biology are rooted in an entrepreneurial story that has been ongoing for more than a century.

In 1897, Marcel Mérieux, who had studied under Louis Pasteur, founded his laboratory in Lyon where he developed the first anti-tetanus sera. From the very beginning, the Institut Mérieux laid the groundwork for a bio-industrial organization that would impact both vaccinology and later on the diagnosis of infectious diseases on a global scale.

bioMérieux, headquartered in Marcy l'Étoile, France, was created in 1963 by Alain Mérieux.

Since 2014, Alexandre Mérieux, the great-grandson of Marcel, has been at the helm of this family-owned company as Chief Executive Officer. In December 2017, he was appointed Chairman and CEO by the Board of Directors.

The Company specializes in providing *in vitro* diagnostics solutions (systems, reagents, software and services) whose primary purpose is to identify certain pathogens.

Our products are mainly used in the clinical field for diagnosing infectious diseases, and in the industrial field for the detection of microorganisms in agri-food, pharmaceutical and cosmetic products. Our solutions contribute to improving patient health and ensuring consumer safety.

bioMérieux today employs nearly 13,000 people. We are present in 44 countries and serve more than 160 countries with the support of a large network of distributors. Ninety-three percent of our sales originate outside of France.

## OUR BUSINESS MODEL

2

## 2020 AT A GLANCE

6

## CLINICAL APPLICATIONS

12

## INDUSTRIAL APPLICATIONS

26

## SERVICES

32

## CORPORATE RESPONSIBILITY

38

## GOVERNANCE & FINANCIAL TABLES

67

## GLOSSARY

76

## EDITO

4

## AN INTERNATIONAL MOMENTUM

10

**P. 14** Interview with Pierre Boulud, Chief Operating Officer, Clinical Operations

**P. 16** Diagnostic tests play a key role in combatting the COVID-19 pandemic

**P. 20** The essential diagnostic tests to combat Antimicrobial Resistance

**P. 24** Fighting against sepsis and improving the management of patients in intensive care

**P. 28** Ensuring pharmaceutical product quality

**P. 30** Diagnostics for food safety

## INNOVATION

34

**P. 40** Committed to being a socially-responsible company, with a human-centered vision

**P. 42** Improving public health worldwide through diagnostics

**P. 46** Lowering our environmental impact

**P. 48** Respect for ethics in our interactions

**P. 50** Promoting success and well-being at work

**P. 58** Long-term partnerships with communities

**P. 68** Corporate Governance

**P. 70** Key Figures

**P. 72** Financial tables

**P. 75** bioMérieux share

# OUR BUSINESS MODEL

Pioneering diagnostics to address public health challenges

## OUR RESOURCES AND ASSETS

### COMMITTED TEAMS AROUND THE WORLD

- ≈ 13,000 employees
- Locations in 44 countries
- Diversity, multiculturalism and inclusion
- Good social dialog

### SOLID FINANCIAL FUNDAMENTALS

- Stable family shareholder structure
- Mutual trust with our financial partners (investors and banks)
- Solid structural cash flow generation

### SUSTAINED INVESTMENT IN INNOVATION

- ≈ 13% of revenue
- 1,800 employees
- 17 sites

### STRICT REQUIREMENTS FOR OUR OPERATIONS

- 15 bio-industrial sites
- ≈ 4,000 employees
- ≈ 12,000 suppliers
- Policy of sustained investment
- Code of Conduct

### A RESPONSIBLE ENVIRONMENTAL POLICY

- Careful, responsible consumption of natural resources and primary raw materials and optimization of waste production and recycling
- Greenhouse gas emission management
- Eco-design development and optimization of the life cycle of our products

### A HUMAN-CENTERED AND SUPPORTIVE CORPORATE CULTURE

- Human-centered commitment
- Ties with local stakeholders



## To address our customers' challenges

- Clinical laboratories
- Hospital laboratories
- Physicians
- Blood banks
- Vets
- Industrial control laboratories (agri-food, pharmaceutical and cosmetics)



## OUR VALUE CREATION

### PROMOTING EMPLOYEE ACHIEVEMENTS AND WELL-BEING

- 11 hours' training per employee
- Training take-up rate: 92%
- 7.8% internal promotions
- Employee share ownership plans

### ACHIEVING RESULTS THAT GUARANTEE INDEPENDENCE (CAGR 2017-20)

- Revenue +11%
- Net income +9%
- Free cash flow +26%
- Dividends +22%

### INTERACTING WITH THE HEALTH ECOSYSTEM

- Extensive industrial know-how
- 7 ISO 45001 certified sites
- Medico-economic studies
- Responsible commitment to our suppliers and local procurement policy
- Expertise sharing with healthcare professionals
- Responsible personal data management
- Code of Conduct training for everyone

### IMPROVING PUBLIC HEALTH WORLDWIDE

- Open innovation (joint research laboratories, public/private partnerships)
- Product quality and safety

### PRESERVING THE PLANET

- 9 ISO 14001 certified sites
- 2020 target exceeded (-20% reduction in energy and water consumption as well as in greenhouse gas emissions)
- Eco-design approach for products

### ENSURING A POSITIVE EFFECT ON COMMUNITIES

- €22 million spent in 2020 (50% of anticipated dividends), earmarked for solidarity-based initiatives to respond to COVID-19 consequences
- 33.5% of revenue set aside for sponsorship\*
- Employee and Company involvement in local communities
- Fair tax contribution

\* Based on bioMérieux SA revenue.

## OUR FUNDAMENTALS

A family-owned company with a long-term vision

## 4 GENERATIONS

COMMITTED TO SERVING PUBLIC HEALTH



1897

Marcel Mérieux created Institut Mérieux after studying alongside Louis Pasteur.



1937

Dr. Charles Mérieux takes over



1963

Alain Mérieux creates bioMérieux



2014

Alexandre Mérieux becomes Chief Executive Officer and Chairman in 2017



# EDITO

**Alexandre Mérieux**  
Chairman and CEO

Twenty twenty has been an unusual year in more ways than one. For more than a year, the world has been living to the rhythm of statistics about the incidence of new COVID-19 infections, hospitalizations and deaths. In response to this pandemic, healthcare leaders have felt the full weight of their responsibility towards citizens and patients all over the world. This has generated momentum of unprecedented scope and speed, driving innovation globally in the fields of diagnostics, treatments and vaccines.

True to its mission to improve public health through *in vitro* diagnostics, bioMérieux quickly mobilized its energies to join in this international effort. Our teams have worked tirelessly in a remarkable spirit of collaboration, motivated by the need to respond to a medical emergency. Thanks to this exceptional mobilization at every level of the Company, in record time we

**Faced with skyrocketing global demand, our teams showed incredible resilience and agility.**

successfully developed, produced and commercialized diagnostic tests that provide the basis for public health strategies to tackle COVID-19 everywhere. Between March and May 2020, we brought to market three complementary molecular biology tests in our ARGENE® and BIOFIRE® ranges to detect active SARS-CoV-2 infections, as well as two serology tests in our VIDAS® immunoassay range to confirm the presence of antibodies in patients. Over the course of the year, we have enhanced our product portfolio

as we ramped up production of our EMAG® and easyMAG® systems and the necessary reagents for the extraction of nucleic acids, an essential step in molecular biology testing. Faced with skyrocketing global demand, our teams showed incredible resilience and agility. We organized ourselves to increase the capacity to supply equipment and reagents while at the same time fully ensuring the safety of our employees on site, our absolute priority.

This pandemic has clearly revealed the vital role that diagnostics plays in the healthcare chain, demonstrating its importance for screening, patient management and epidemiological surveillance. Moreover, the pandemic has accelerated the underlying demands of our sector: the need to react very quickly in response to emerging infectious diseases, to provide rapid and reliable tests that can be performed in close proximity to patients, and to design tools that support decision making by using data as efficiently as possible. We will rise to these challenges by continuing to invest in research and innovation to develop solutions that provide more high medical value information while meeting the highest standards in response to the expectations of biologists and physicians. This is something we must do with an open mind. Across the globe, the sudden emergence of SARS-CoV-2 serves as a reminder that human health, animal health, the environment and the impact of human activity on the environment are all interconnected. Now more than ever, we need the different health stakeholders – from private companies to public sector organizations, research centers, our customers and biotech start-ups – to work together.

**This health crisis must not cause us to lose sight of the many other infectious disease threats that also require our utmost attention.**

Like the rest of the world, we have devoted a great deal of energy to fighting the COVID-19 pandemic in 2020, and we will continue this effort in 2021. This health crisis must not, however, cause us to lose sight of the many other infectious disease threats that also require our utmost attention. Once again, diagnostics has and will have a key role to play in the continuum of care. Antimicrobial resistance, which has become even more serious due to the overutilization of antibiotics during the pandemic, remains an essential focus of our strategy.

The fight against sepsis, which each year affects 49 million people, of whom 20% do not survive, is also an important priority for us. In the field of industrial microbiological control, we will continue to develop solutions to protect consumers' health and safety, primarily in two major sectors: the pharmaceutical industry and the agri-food sector.

Since it was founded more than 55 years ago, bioMérieux has always adopted a socially-responsible, human-centered approach to business development. In addition to supporting the Mérieux Foundation and the Fondation Christophe et Rodolphe Mérieux, two independent family foundations dedicated to the fight against infectious diseases in disadvantaged countries, we decided to play our part to offset the economic and social consequences of the COVID-19 pandemic. To provide financial backing for projects that help the most vulnerable populations worldwide, we allocated half of our 2019 dividends to an exceptional philanthropy operation in France and beyond. In the same spirit, we created the bioMérieux corporate endowment fund, which will support economic solidarity and education initiatives over the next several years.

Finally, following extensive consultations, we have set an ambitious new goal concerning our responsibility to society, our workforce and the environment. It involves all the Company's functions. This strategy, which upholds the values we have inherited, will provide fresh impetus to our positive commitment to serve public health while respecting the environment, developing our employees' wellbeing, and strengthening ties with our ecosystems and our stakeholders.

# 2020 AT A GLANCE

## PRODUCT NEWS

### CLINICAL APPLICATIONS



#### ETEST®

FDA clearance for the ETEST® Plazomicin and ETEST® Delafloxacin and the expansion of the sale of ETEST® Meropenem/Vaborbactam, ETEST® Imipenem/Relebactam, and ETEST® Delafloxacin outside of the United States.

#### BIOFIRE® BLOOD CULTURE IDENTIFICATION 2 (BCID2) PANEL

FDA clearance and CE marking of the new generation of the Blood Culture Identification Panel, which includes several additional pathogens and an expanded list of antimicrobial resistance genes.

#### SARS-COV-2 R-GENE®

CE marking and emergency use authorization (EUA) from the FDA for this real-time PCR test, part of the ARGENE® molecular biology range, which detects the SARS-CoV-2 coronavirus from nasopharyngeal samples. CE marking was extended in November 2020 to include saliva and oropharyngeal (throat) swab samples.

#### BIOFIRE® COVID-19

Emergency use authorization (EUA) from the FDA for use of this test in CLIA moderate and high complexity clinical laboratories to detect SARS-CoV-2 in approximately 45 minutes using a nasopharyngeal swab in transport media.

#### BIOFIRE® RESPIRATORY PANEL 2.1 (RP2.1) AND BIOFIRE® RESPIRATORY PANEL 2.1 plus (RP2.1plus)

Emergency use authorization (EUA) from the FDA for the RP2.1 panel covering 22 pathogens responsible for respiratory infections, including SARS-CoV-2. The CE-marked RP2.1plus panel also detects MERS-Coronavirus in addition to the SARS-CoV-2 virus.

#### VIDAS® SARS-COV-2 IgM AND SARS-COV-2 IgG

CE marking and emergency use authorization (EUA) from the FDA for the VIDAS® SARS-COV-2 IgM and IgG serology tests to detect antibodies in individuals who have been exposed to the virus responsible for COVID-19.



#### BIOFIRE® EZ 2.1

Emergency use authorization (EUA) from the FDA for a new version of the BIOFIRE® RP-EZ Respiratory Panel, including SARS-CoV-2. The EZ Respiratory Panel is CLIA-waived (for use outside of clinical laboratories) and is available only in the United States.



#### SARS-COV-2 RESPI R-GENE®

CE marking for the molecular biology test in the ARGENE® range for the detection of SARS-CoV-2, influenza viruses A and B, RSV (human respiratory syncytial virus) and hMPV (human metapneumovirus) from a single sample.

#### VIDAS® NEPHROCHECK®

CE marking of this innovative assay to detect kidney stress in patients at risk of acute kidney injury (AKI).

### INDUSTRIAL MICROBIOLOGICAL CONTROL



#### BIOFIRE® MYCOPLASMA

The first all-in-one molecular test for mycoplasma detection in biopharmaceutical products was launched in the United States and gradually expanded to countries in Europe.

#### VERIPRO® SARS-CoV-2

bioMérieux received the first-ever COVID-19-related Certificate of Validation for this environmental assay by AOAC INTERNATIONAL's Emergency Response Validation (ERV) program.

## SITE NEWS

### AUSTRALIA

- Our employees moved into their new offices in North Ryde, on the outskirts of Sydney. They will soon be joined by the BIOBALL® production and warehouse teams.



### CHINA

- Two new building projects got underway in Suzhou: a new production facility and a new site that will bring all of Hybiome's activities together in one location.



### UNITED STATES

- The Salt Lake City, Utah campus inaugurated a new building with a footprint of over 28,000 square meters to accommodate the growth of the BIOFIRE® range.
- bioMérieux's North American headquarters relocated from Durham, North Carolina to Salt Lake City, Utah as part of the project to bring bioMérieux Inc. and BioFire closer together.



### FRANCE

- The Craponne site, specialized in the production of culture media, has expanded to improve and increase site capacity. Following the inauguration, it can now accommodate nearly 1,500 workers.
- The Grenoble site and its logistics capacity were expanded to keep pace with the increased production of GENE-UP®.
- The Verniolle site was enlarged to have capacity for production of the ARGENE® SARS-COV-2 R-GENE® test.
- The project to expand the International Distribution Center got underway in Saint-Vulbas.



# ...2020 AT A GLANCE

## INVESTMENTS

### SPECIFIC

#### SPECIFIC DIAGNOSTICS (MOUNTAIN VIEW, UNITED STATES)

This company specializes in more rapid analysis of antibiotic susceptibility tests.



#### ACCELLIX (SAN JOSE, UNITED STATES - JERUSALEM, ISRAEL)

This company is actively developing a platform designed to respond to critical quality control requirements for cellular and gene therapy firms.

## PARTNERSHIPS



#### BAXTER (UNITED STATES)

Exclusive distribution agreement for the NEPHROCLEARTM CCL14 test currently in development for use in assessing the risk of persistent severe acute kidney injury (AKI), for Europe and the United States.



#### CREATION OF THE BIOTECH DIGITAL CAMPUS (FRANCE)

bioMérieux is helping to develop this one-of-a-kind training platform. Launched in December, it will contribute to the development of bioproduction skills to meet new technological challenges and to address the ongoing issue of self-sufficiency in healthcare.



#### FILIÈRE NATIONALE DU DIAGNOSTIC (FRANCE)

Joining the Eurobiomed, Lyon Biopôle and Medicen clusters, the *Syndicat de l'Industrie du Diagnostic in vitro* (SIDIV), and the companies halio Dx, MagIA diagnostics, Stago and Stilla Technologies, bioMérieux is now part of the steering committee of the *Filière Nationale du Diagnostic*, an organization created to promote the value of diagnostics and to strengthen national self-sufficiency in healthcare.



#### AMSP (AFRICA)

Agreement with the Africa Medical Supplies Platform to facilitate the supply of diagnostic solutions to fight the COVID-19 pandemic in Africa.

## AWARDS



#### FAMILY SAGA BFM 2020 AWARD

Alexandre Mérieux, Chairman and CEO of bioMérieux, received this award, which recognizes more than 120 years of one family's commitment to public health.



#### TOP EMPLOYER

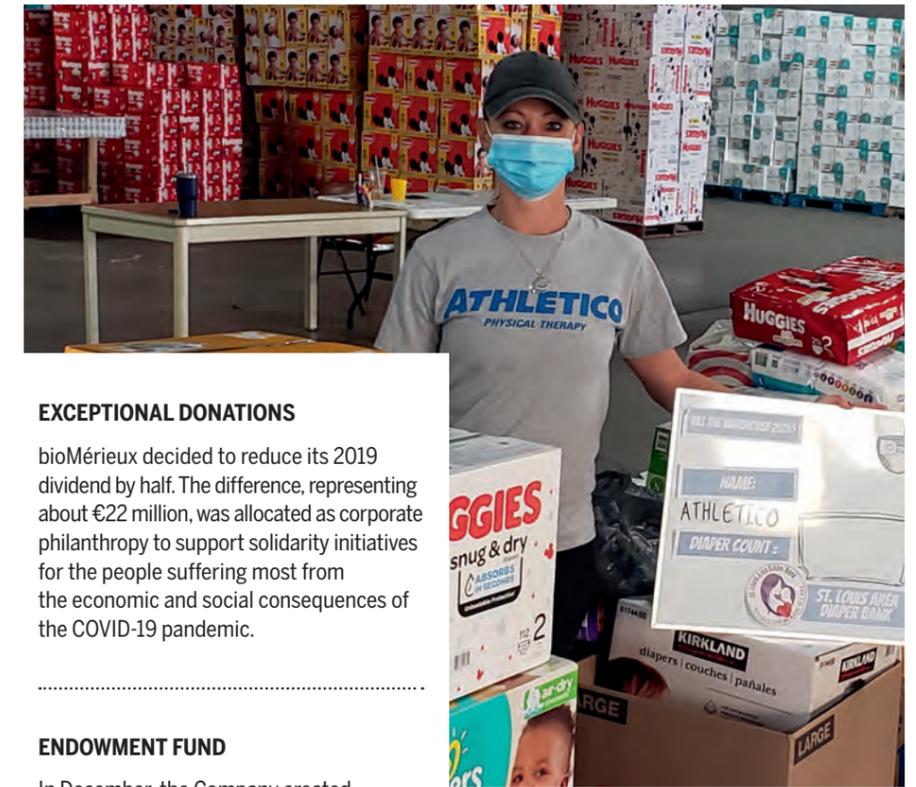
bioMérieux has received Top Employer certification for 11 of its subsidiaries and regional certification for Europe and Africa, recognizing the company's excellent working conditions and environment.



#### GREAT PLACE TO WORK®

bioMérieux Brazil and Mexico received this certification, which recognizes companies that are great places to work.

## PHILANTHROPY



#### EXCEPTIONAL DONATIONS

bioMérieux decided to reduce its 2019 dividend by half. The difference, representing about €22 million, was allocated as corporate philanthropy to support solidarity initiatives for the people suffering most from the economic and social consequences of the COVID-19 pandemic.

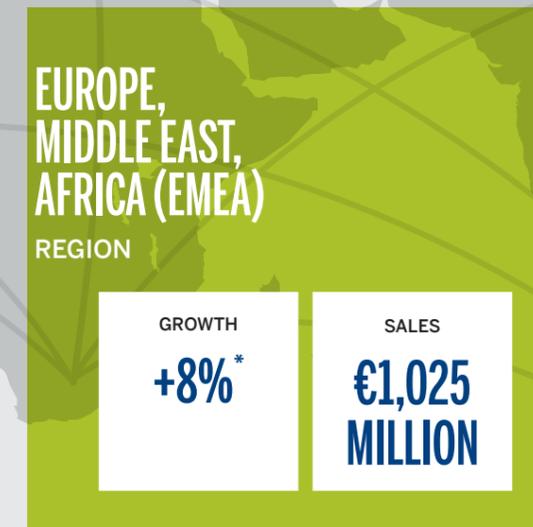
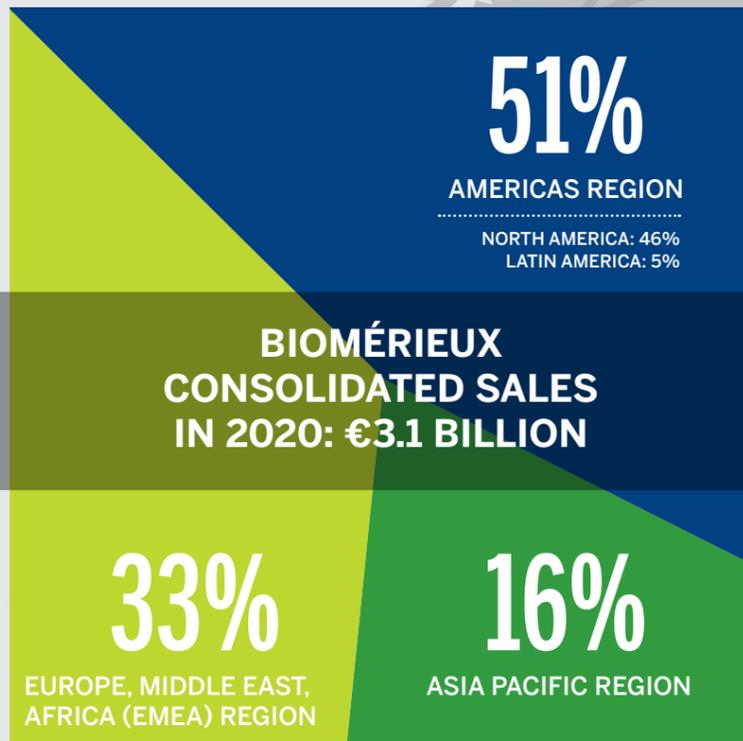
#### ENDOWMENT FUND

In December, the Company created the bioMérieux Endowment Fund to help the most vulnerable populations, and contributed a €20 million as an initial endowment.



# AN INTERNATIONAL MOMENTUM

bioMérieux's development strategy is based on an international, long-term vision to meet the healthcare challenges related to infectious diseases all over the world. Located in 44 countries, we serve more than 160 countries with the support of a large network of distributors.



bioMérieux is present on all continents through 15 major production sites, 17 R&D centers, subsidiaries and offices. Almost 13,000 employees contribute to our public health mission while respecting the human-centered values upheld by the Mérieux family.

\* Year to year, at constant exchange rates and scope.

# CLINICAL APPLICATIONS



A world leader in the field of *in vitro* diagnostics for more than 55 years, bioMérieux is motivated by its pioneering spirit and ongoing commitment to provide diagnostic solutions to improve patient health worldwide. We develop tests with high medical and economic value, designed primarily to identify disease-causing microbes. They deliver rapid and reliable results for better patient outcomes.

As a world leader in the field of microbiology, a specialist in immunoassays, and a pioneer and leader in molecular syndromic diagnostics, we respond to major public health challenges such as the diagnosis of COVID-19, the fight against antimicrobial resistance, and improving sepsis management and critical care.

In 2020, bioMérieux launched a virtual booth, <https://virtualbooth.biomerieux.com/> that provides detailed information about our diagnostic solutions.

A portrait of Pierre Boulud, Chief Operating Officer, Clinical Operations, standing in a modern office setting with large windows and glass partitions. He is wearing a grey suit jacket over a white shirt.

## INTERVIEW

**Pierre Boulud**  
Chief Operating Officer, Clinical Operations

“Our new organization is even closer to our customers’ needs, strengthening our public health mission”

### HOW HAS THE MARKET FOR IN VITRO INFECTIOUS DISEASE DIAGNOSTICS EVOLVED?

**PB :** The COVID-19 health crisis has been a real wake-up call: from healthcare professionals and organizations to the general public, everyone is now aware of the vital role that diagnostic tests play in combatting infectious disease. This situation has intensified the fundamental need for diagnostic tools that can be performed in close proximity to patients and deliver rapid, reliable results. Of course, molecular biology is perfectly adapted to meeting all of these needs. We have also seen how the pandemic highlights the importance of making testing accessible in pharmacies, at the doctor’s office, and even at home. These are the major trends that we are observing while tests naturally continue to meet the highest quality standards.

### HOW IS BIOMÉRIEUX POSITIONED IN THIS MARKET?

**PB :** Our Company is a world leader in the field of infectious disease diagnostics, with the advantage of being a pure player in this market: 100% of our R&D investments go to developing diagnostic solutions! In two leading technologies – molecular biology and microbiology – we hold a strong position, and we are also specialized in immunoassays. As a result, we have the capacity to meet the needs of laboratories and clinicians using different technology platforms.

Unlike other companies that work in a wide range of disease areas, bioMérieux focuses its clinical activity mainly on infectious disease diagnostics. This expertise allows us to address major health challenges like antimicrobial resistance. Among our solutions, 80% contribute to this area, making it possible to address a growing number of needs to counter this threat.

The commitment and support of the Mérioux family, as the majority shareholder, and the long-term vision that characterizes our Company also give us a unique position in this market.

*Contributing collectively to the common good: is this not the most rewarding role a company can play?*

### IN FEBRUARY 2020, A NEW ORGANIZATION WAS ANNOUNCED FOR CLINICAL OPERATIONS. WHAT ARE THE KEY CHANGES?

**PB :** We have reorganized our Clinical Operations to focus on five major regions: Africa, North America, Latin America, Asia Pacific and Europe-Middle East. Healthcare realities are different in each of the regions, so it makes sense to distribute them this way. It is also based on the dynamics, commercial models and growth opportunities that are specific to each region. Our new organization is even closer to our customers’ needs, strengthening our public health mission. Another important feature consists of bringing together grass-roots operational activities and more strategic activities, like marketing and customer service, within a global entity. This will allow us to take a more efficient approach, from the development of a new solution right up to its roll-out across a country’s laboratories. And ultimately, it will bring greater benefits for patients.

### WHAT LESSONS CAN BIOMÉRIEUX LEARN FROM THE COVID-19 HEALTH CRISIS?

**PB :** In 2020, in record time we brought to market molecular and serology diagnostic tests to detect SARS-CoV-2 (see p. 16): this performance illustrates our teams’ capacity for action and the fact that our technology platforms are very well suited to meeting diagnostic needs. We continued to support our customers worldwide, and some of our employees continued to go into the hospitals to provide equipment maintenance and to install new systems. All of our teams have shown that they are able to adapt in record time. In this particular context, they sustained an exceptional level of customer service (see p. 32). Together, we all learned to work remotely and, although we understand that this has its limits, during these difficult times we have all contributed to driving the company forward.

The motivation to uphold bioMérieux’s public health mission has been bolstered by the health crisis, which has produced an even stronger level of engagement across our workforce, regardless of an employee’s job. Contributing collectively to the common good: is this not the most rewarding role a company can play?

# DIAGNOSTIC TESTS PLAY A KEY ROLE IN COMBATting THE COVID-19 PANDEMIC

True to our public health mission, in early 2020 we began the development of tests to detect the virus responsible for COVID-19. Our molecular biology strategy revolves around quickly developing complementary real-time PCR\* tests and leveraging our expertise in the automated extraction of nucleic acids. In the field of immunoassays, we have developed two serology tests.

Around the world, our employees whether in production or logistics sites, on the field or working in support functions, were fully committed to meeting the needs of our customers and doing their part to fight the pandemic.



## ARGENE® REAL-TIME PCR RANGE

### Full and complementary diagnostic ranges

The **SARS-COV-2 R-GENE®** test uses real-time PCR technology (RT-PCR) to specifically detect the coronavirus responsible for COVID-19. Results are delivered in 4 to 5 hours, and a large number of patient samples may be processed simultaneously.

As for all tests in the ARGENE® range, the SARS-COV-2 R-GENE® test may be performed by any laboratory using PCR technology on most commercially-available nucleic acid extraction and amplification platforms. The test, developed by the teams at our Verniolle (Ariège) and Grenoble (Isère) sites in France, is produced in Verniolle.

The French National Reference Center for Respiratory Infections validated the test in March 2020, and demonstrated its high quality.

This test received CE marking in April 2020 and emergency use authorization (EUA) from the U.S. Food and Drug Administration (FDA) in May 2020.

In November 2020, the CE marking of the SARS-CoV-2 R-GENE® diagnostic test was expanded to include saliva and oropharyngeal (throat) swab specimens. This expansion allows bioMérieux to address the recommendation issued by the French National Authority for Health (HAS) on September 18, 2020, which encourages the preferential use of saliva swabs to test symptomatic individuals for whom it is difficult or impossible to use nasopharyngeal swabs (in children, for instance). It also simplifies laboratory workflows, as these sampling methods are easier to perform.

\* Polymerase Chain Reaction.



## BIOFIRE® REAL-TIME PCR RANGE



The **SARS-COV-2 RESPI R-GENE®** test, which received CE marking in December 2020, can simultaneously detect SARS-CoV-2, influenza viruses A and B, and other respiratory viruses (RSV and hMPV).

Infections caused by respiratory viruses often have similar symptoms, but patient management may differ. In light of the COVID-19 pandemic, detecting other pathogens associated with respiratory disease early on makes it possible to adapt clinical management and limit the circulation of these viruses.

■ The fully-automated **BIOFIRE® COVID-19** test delivers results in 45 minutes from a patient's nasopharyngeal swab sample. It is suitable for use in emergency situations for patients in critical health condition. Developed with financial support from the U.S. Department of Defense, the test is produced in Salt Lake City, Utah. It received emergency use authorization (EUA) from the U.S. FDA in March 2020.

■ The third molecular test developed by bioMérieux to detect the COVID-19 virus is an expanded version of its molecular biology syndromic panel, the **BIOFIRE® Respiratory Panel 2.1 (RP2.1)**. This panel uses a single nasopharyngeal sample to detect the 22 most common respiratory pathogens, including the SARS-CoV-2 virus, and delivers results in 45 minutes. Available only outside of the U.S., the **BIOFIRE® Respiratory Panel 2.1 plus (RP2.1plus)** includes the detection of MERS-Coronavirus, responsible for Middle East respiratory syndrome.

Both panels are available to run on the FILMARRAY® 2.0 and FILMARRAY® TORCH systems.

RP2.1 obtained emergency use authorization (EUA) from the U.S. FDA in May 2020 and RP2.1plus received CE marking in July 2020.

■ The **BIOFIRE® Respiratory Panel RP2.1 EZ** detects 15 viruses, including SARS-CoV-2, and 4 bacteria that cause respiratory infections. It obtained emergency use authorization (EUA) from the U.S. FDA in October 2020. It is CLIA-waived (for use outside of clinical laboratories) and is available only in the United States. This panel is available through the BIOFIRE® FILMARRAY® 2.0 EZ system.

■ The **VIDAS® SARS-COV-2 IgM** and **SARS-COV-2 IgG** serology tests, which provide results in less than 30 minutes from a blood sample, measure the presence of antibodies in people who have been infected with SARS-CoV-2. The performance of these tests was validated in close collaboration with several hospitals, on a large number of clinical samples.

The tests were developed and produced in France.

They received CE marking in May 2020 and obtained emergency use authorization (EUA) from the U.S. FDA in August 2020.

## VIDAS® IMMUNOASSAY RANGE



### MARCH 17

ARGENE® SARS-COV-2 R-GENE® test validated in France by the National Reference Center for Respiratory Infections

### MARCH 23

BIOFIRE® COVID-19 test receives EUA from the U.S. FDA

### APRIL 10

ARGENE® SARS-COV-2 R-GENE® test receives CE marking

### MAY 1

New BIOFIRE® Respiratory Panel 2.1 (RP2.1) including the SARS-CoV-2 virus receives EUA from the U.S. FDA

### MAY 6

ARGENE® SARS-COV-2 R-GENE® test receives EUA from the U.S. FDA

### MAY 20

VIDAS® SARS-COV-2 IgM and SARS-COV-2 IgG tests receive CE marking

### JULY 15

BIOFIRE® Respiratory Panel 2.1 plus (RP2.1plus) including the SARS-CoV-2 virus receives CE marking

### AUGUST 7

VIDAS® SARS-COV-2 IgM and SARS-COV-2 IgG receive EUA from the U.S. FDA

### OCTOBER 2

New BIOFIRE® 2.1-EZ Respiratory Panel (RP2.1-EZ) including the SARS-CoV-2 virus receives EUA from the U.S. FDA

### NOVEMBER 3

CE marking of the ARGENE® SARS-COV-2 R-GENE® test is expanded to include saliva and oropharyngeal (throat) swab specimens

### DECEMBER 14

ARGENE® SARS-COV-2 RESPI R-GENE® test receives CE marking



## Other valuable solutions for patient care during the pandemic

In addition to the SARS-CoV-2 diagnostic tests, the BIOFIRE® Respiratory and Pneumonia Panels have proven extremely useful during the COVID-19 pandemic for determining the pathogen causing the infection.

Furthermore, routine laboratory parameters, including VIDAS® tests, can provide information about the risk of a hospitalized patient's condition deteriorating: the presence of troponin, for instance, is an indicator of heart damage, a potential complication of COVID-19; abnormal coagulation results (including D-dimer levels) have been observed in patients with COVID-19, and are associated with a poor prognosis; and elevated serum ferritin levels may be a sign that the disease is worsening.

For patients in the most critical condition, NEPHROCHECK®, now also commercially available in certain European markets (CE-marked) on VIDAS® 3, our highest throughput system, provides important information to critical care and emergency room doctors about the risk of acute kidney injury (AKI).

Patients in intensive care have a significantly higher risk of secondary bacterial infection. All our microbiology solutions and BIOFIRE® molecular biology panels help detect and identify the pathogens responsible for the infection as well as their antibiotic resistance profile, which helps clinicians determine the most appropriate treatment.

*During the MERS-CoV epidemic that impacted the Middle East in 2012, we developed a generic molecular kit that was designed to address the sudden emergence of new pathogens. This expertise, combined with the exemplary mobilization of the French teams in Verniolle and Grenoble, enabled us to save an enormous amount of time as we developed and brought to market the SARS-COV-2 R-GENE® test."*

**MARTINE JOANNES**  
Head of Molecular Biology Franchise, bioMérieux

## DEMONSTRATING THE VALUE OF DIAGNOSTICS

The global COVID-19 crisis has highlighted the key role that diagnostics plays in the healthcare chain. Laboratory tests are essential to confirm the infection:

- to ensure that patients receive appropriate care, since diagnostic tests can determine whether the patient is infected with COVID-19, a co-infection or a secondary infection, and also identify the infectious agent causing their illness. For serious infections, quickly and accurately identifying the pathogenic agents in the bloodstream and testing

- for antimicrobial susceptibility can help physicians provide better care;

- so that the public health authorities who receive the information about the extent and severity of the epidemic can adapt their strategies.

**PCR technology is recommended for fast, accurate diagnostics.**

**Serology tests have a key role to play in monitoring the immunity of the general population and that of specific groups.**



## An expanded portfolio to fight respiratory infections

Respiratory infections are both extremely common and potentially serious. They represent one of the 10 most common causes of death:

- upper respiratory tract infections are the main cause of disease incidence worldwide;
- lower respiratory tract infections remain the leading cause of death due to infectious diseases.

Diagnostic tests are essential to combat these serious infections and limit the unnecessary and inappropriate use of antibiotics in order to avoid the side effects associated with their use, as well as to slow and even prevent the emergence of drug-resistant bacteria.

## The bioMérieux product offering includes:

### Molecular biology solutions

- Simultaneous identification with **BIOFIRE® RP 2.1** (18 viruses and 4 bacteria) and **BIOFIRE® RP2.1plus** (19 viruses and 4 bacteria), as well as two tests available only in the United States that are CLIA-waived (for use outside of clinical laboratories): **BIOFIRE® RP EZ** (11 viruses and 3 bacteria) and **BIOFIRE® RP2.1 EZ** (15 viruses and 4 bacteria).

- The **BIOFIRE® Pneumonia and Pneumonia plus panels**: the first panel identifies 33 targets (18 bacteria, 8 viruses and 7 antimicrobial resistance genes), while the second includes the same targets, as well as the MERS-CoV emergent virus.

- The **ARGENE® range** is composed of ready-to-use, real-time PCR kits for the detection of pathogens involved in respiratory tract infections.

The **VIDAS® B-R-A-H-M-S PCT™ test** measures procalcitonin (PCT) levels to better differentiate between viral and bacterial infections. It thus avoids the inappropriate and unnecessary use of antibiotics. It also helps monitor the patient's response, in order to personalize treatment duration and make decisions about when to stop antibiotics without risk, as soon as possible. PCT is also a prognostic marker for sepsis, supporting the rapid management of appropriate patient care in the event of this serious illness<sup>1</sup>.

**Solutions for culture media and identification** with chromogenic culture media from the **CHROMID® range** for the detection of *Pseudomonas aeruginosa*, *Staphylococcus aureus* and methicillin-resistant *Staphylococcus aureus* (MRSA).

The **ETEST® range** for specific antimicrobial susceptibility testing.

The **VITEK® range** for the identification and automated antimicrobial susceptibility testing of more than 400 microorganisms. It delivers sensitivity/resistance results in a few hours.

1. Serial Procalcitonin Predicts Mortality in Severe Sepsis Patients: Results From the Multicenter Procalcitonin Monitoring SEpsis (MOSES) Study. Schuetz P, Birkhahn R, Sherwin R et al. Crit Care Med. 2017 May;45(5):781-789.

## NUCLEIC ACID EXTRACTION: AN ESSENTIAL STEP

Due to the COVID-19 pandemic, global demand has skyrocketed for the reagents and instruments needed to extract nucleic acids (NA), an essential pre-PCR step.

The bioMérieux teams in Italy and France have worked tirelessly to ensure the continuity, and even ramping up, of production of the EMAC® and easyMAG® systems and their respective reagents.

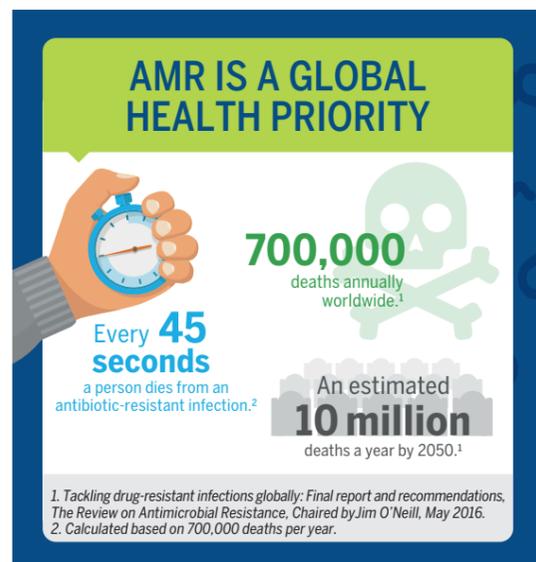
## THE ESSENTIAL DIAGNOSTIC TESTS TO COMBAT ANTIMICROBIAL RESISTANCE

For decades, we have been witnessing the emergence of a growing number of microorganisms (bacteria, viruses, parasites, etc.) with the capacity to defeat drugs specifically designed to kill them.

Currently, at least 700,000 people die each year due to drug-resistant infections. The World Health Organization (WHO) has declared antimicrobial resistance (AMR) to be one of the ten primary global public health threats facing the world today.



Relying on the expertise acquired in the field of infectious disease diagnostics, bioMérieux has made the fight against antimicrobial resistance one of its priorities. The Company offers a unique and comprehensive range of diagnostic solutions that support medical decisions by clinicians and promote the responsible use of antibiotics.



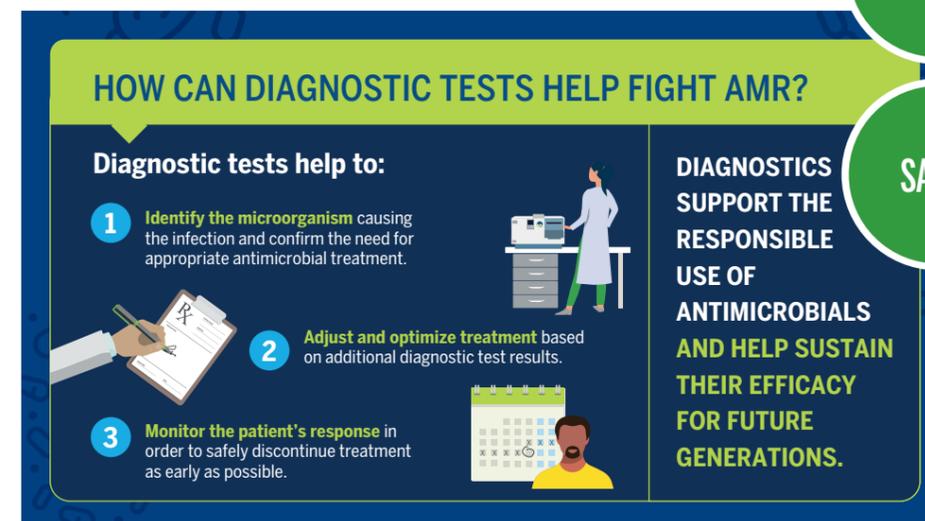
### AMR is the problem, AMS is the solution!

Antimicrobial stewardship (AMS) is one of the primary means to preserve the efficacy of antibiotics for future generations. Thanks to well-designed hospital programs to support and oversee the use of antibiotics, AMS contributes to combatting a rise in antibiotic resistance and preventing the spread of resistant microbes in healthcare settings.

Diagnostic solutions play a key role in programs to promote the appropriate use of antibiotics: laboratory results guide clinical decisions about when to start, how to optimize, and when to stop treatment with the appropriate antibiotic. These are essential steps to improve patient outcomes and control the spread of multi-resistant organisms.

bioMérieux is a recognized partner to laboratories and hospitals working to ensure that AMS initiatives have the greatest impact possible, and our ambition is to become the undisputed leader of the *in vitro* diagnostics sector in this field. In 2020, we strengthened our organization with the creation of a dedicated global working group that aims to:

- support our sales teams through an e-learning program about the medical and economic value of our AMS solutions;
- promote the value of diagnostics in this field.



**3/4** of our R&D budget is earmarked to combat AMR



**+80%** of our sales are directly or indirectly connected to the fight against AMR

### FDA clearance and CE marking for the expanded BIOFIRE® BCID2 blood culture identification panel

The BIOFIRE® BCID2 Panel has been developed from the original panel, available since 2013. It includes several additional pathogens and an expanded list of antimicrobial resistance genes. It identifies 26 bacteria, 7 yeasts, and 10 antimicrobial resistance genes, including 4 classes of carbapenemases, an MCR-1 (colistin resistance) gene, extended-spectrum beta-lactamases, emerging pathogens such as *Candida auris*, and new targets to more accurately identify methicillin-resistant *Staphylococcus aureus* (MRSA). This new panel is compatible with the FILMARRAY® 2.0 and FILMARRAY® TORCH systems.

*Antimicrobial stewardship (AMS) programs should be developed in hospitals to complement hygiene and infection prevention and control initiatives. Diagnostic tests are essential to distinguish patients who require the prescription of antibiotics from those who do not. Such tests are also critical to identify the pathogenic agents causing an infection and to characterize their resistance profiles, to orient and monitor antibiotic therapy, and finally to detect carriers of multi-resistant bacteria."*

**MARK MILLER**

Executive Vice President and Chief Medical Officer, bioMérieux



### New antibiotic susceptibility tests

The VITEK® 2 automated antibiotic susceptibility testing system can identify and test the antibiotic susceptibility for the vast majority of microorganisms (more than 400). Results are delivered within hours. To enrich our portfolio, new VITEK® 2 MDRO\* antibiotic susceptibility testing cards were launched at the end of 2019. These cards are especially valuable because they test for second- and third-line antibiotic resistance when there is a suspicion of multi-resistant bacteria. When customers use them together with our existing antibiotic susceptibility cards, they can test for antibiotic resistance for nearly 34 compounds simultaneously. Our VITEK® 2 solution helps to position diagnostics at the heart of AMS programs because it supports clinicians to make enlightened decisions about the most appropriate choice of antibiotic for their patients.

VITEK® 2 complements the ETEST® range.

The products in the ETEST® range determine an antibiotic's Minimum Inhibitory Concentration (MIC). Developed in close collaboration with pharmaceutical companies, and launched on the market at the same time as new antibiotics, the tests are an effective guide for clinicians in their choice of appropriate, personalized treatment for patients whose condition is of concern and for whom the arrival on the market of a new compound could represent a novel therapeutic option.

In 2020, bioMérieux received FDA clearance for ETEST® Plazomicin and ETEST® Delafloxacin as well the expanded commercialization outside of the United States for ETEST® Meropenem/Vaborbactam, ETEST® Imipenem/Relebactam and ETEST® Delafloxacin.

### How the COVID-19 pandemic contributes to antimicrobial resistance

Since the outset of the COVID-19 pandemic, antimicrobial resistance has increased due to the overuse of antibiotics among patients infected with SARS-CoV-2. Once again, the role of diagnostics is essential to reduce the risk of antimicrobial resistance and to optimize patient care.

Antibiotics are not effective to treat or prevent viral infections. Such therapies may nevertheless be administered to patients who are hospitalized for a coronavirus infection, to prevent the potential risk of secondary bacterial infections. Recent data have shown that among hospitalized COVID-19 patients, less than 10% actually had bacterial co-infections, with a higher prevalence among patients requiring critical care. And yet more than 70% of COVID-19 patients have received antibiotics. The figure reaches as high as 87.7% in some hospitals<sup>1</sup>.

This can have a serious impact on antimicrobial resistance, which is why the WHO discourages the use of antibiotics for moderate cases of COVID-19 and recommends their administration among patients with a severe form of the disease for whom there is a higher risk of secondary bacterial infections and death<sup>2</sup>.



### THE DATA ANALYSIS SOFTWARE SOLUTIONS AT THE HEART OF OUR AMS STRATEGY

### INSIDE THE LABORATORY

#### MYLA® consolidates test results

MYLA® is an IT solution that connects several instruments to the microbiology laboratory information system (LIS) in order to consolidate analytical data. MYLA® oversees the flow of information to instruments, ensures full traceability of exchanges with the IT system, and delivers useful indicators of laboratory efficiency. MYLA® strengthens the medical value of diagnostic tests by consolidating all the results from VITEK® MS, VITEK® 2 and BACT/ALERT® 3D and complementary instruments in the bioMérieux product ranges.

By monitoring infections and resistance using statistical and epidemiological tools, MYLA® provides a valuable resource for antimicrobial stewardship programs.

#### EPISEQ® CS helps fight healthcare-associated infections

Within the scope of its partnership with Illumina, a global leader in sequencing, bioMérieux has developed a next generation sequencing solution for the epidemiological monitoring of bacterial infections. Launched in 2019, EPISEQ® CS covers the 13 bacterial species most commonly responsible for healthcare-associated infections, and can be applied no matter what sequencing technology. The stakes are high: many hospital wards are affected by these Healthcare-Associated Infections (HAIs), which are increasingly difficult to target due to the emergence of multi-drug resistant bacteria. They also represent a significant cost for hospitals.

### OUTSIDE THE LABORATORY

#### Clinical Decision Support Software (CDSS), a tool for antibiotic prescriptions in hospital settings

In late 2017, a partnership was forged between bioMérieux and Lumed, an innovative Canadian start-up at the crossroads between information technology and medicine. The agreement concerns the distribution in Canada and an evaluation in France of software solutions: APSS (Antimicrobial Prescription Surveillance System) is designed to help hospitals optimize the use of antibiotics, and thereby combat antimicrobial resistance; ZINC is dedicated to the detection and monitoring of healthcare-associated infections.

#### CLARION™ connects diagnostic data

Launched in early 2021 in the United States, CLARION™ is a software solution designed to support AMS programs. It provides laboratories and hospitals with critical data and information about the medico-economic impact of diagnostics and AMS. CLARION™ Value VIDAS® B-R-A-H-M-S PCT™ optimizes the utilization of procalcitonin (PCT) by showing the impact of PCT use on the length of hospital stays.

\* MDRO : Multi-drug resistant organisms.

1. Langford BJ, So M, Raybardhan S, et al. Bacterial co-infection and secondary infection in patients with COVID-19: a living rapid review and meta-analysis. *Clinical Microbiology and Infection*. July 2020.

2. <https://www.who.int/fr/news/item/01-06-2020-record-number-of-countries-contribute-data-revealing-disturbing-rates-of-antimicrobial-resistance>

## FIGHTING AGAINST SEPSIS AND IMPROVING THE MANAGEMENT OF PATIENTS IN INTENSIVE CARE

Sepsis is a clinical condition that occurs in patients when their body produces an uncontrolled immune response to an infection. When a patient is brought into the emergency room or an intensive care unit, early recognition of the signs of sepsis and rapid diagnosis are essential to begin appropriate treatment and significantly reduce the risk of mortality.

Even though it is often under-recognized, sepsis is one of the leading causes of death worldwide and the main cause of death from infection.

Sepsis may develop from the clinical deterioration of common infections such as respiratory, gastrointestinal and urinary infections as well as skin and wound infections. It is primarily caused by bacterial infections, although fungal or viral infections can also result in sepsis.

This clinical syndrome may begin with the appearance of non-specific signs that are cause for alarm, such as extreme fatigue and clammy skin... If it is not recognized early enough and treated rapidly, sepsis can cause septic shock with multiple organ failure that leads to the patient's death. In this context, diagnostics often plays a critical role: the sooner sepsis is diagnosed, the greater the likelihood of giving the patient the right therapy to treat the infection, avoiding organ failure.



### WORLDWIDE



EVERY YEAR  
**49 MILLION**  
PEOPLE ACQUIRE SEPSIS



**11 MILLION**  
PEOPLE WILL NOT  
SURVIVE SEPSIS



EVERY  
**2.8 SECONDS**  
SOMEONE DIES FROM  
SEPSIS

According to the WHO, which published its first global report on sepsis in September 2020: "Sepsis disproportionately affects vulnerable populations: newborns, pregnant women and people living in low-resource settings. Approximately 85% of sepsis cases and sepsis-related deaths occur in these settings. Almost half of the 49 million cases of sepsis each year occur among children, resulting in 2.9 million deaths, most of which could be prevented through early diagnosis and appropriate clinical management. These deaths are often a consequence of diarrheal diseases or lower respiratory infections."<sup>1</sup>

1. <https://apps.who.int/iris/bitstream/handle/10665/334216/9789240010789-eng.pdf>  
2. Hu B, Guo H, Zhou P, Shi ZL. Characteristics of SARS-CoV-2 and COVID-19. *Nat Rev Microbiol.* 2020.  
3. Markwart R, Saito H, Harder T, Tomczyk S, Cassini A, Fleischmann-Struzek C, et al. Epidemiology and burden of sepsis acquired in hospitals and intensive care units: a systematic review and meta-analysis. *Intensive Care Med.* 2020;46(8):1536-51.

## SEPSIS AND COVID-19



According to the WHO, 80,453,105 confirmed cases of COVID-19 had been reported worldwide - resulting in 1,775,776 deaths - as of December 30, 2020. Between 2 and 5% of COVID-19 cases are severe, characterized by respiratory failure that results in sepsis<sup>2</sup>.

This complication is common in intensive care units around the globe and leads to longer hospital stays and higher mortality rates (over 40%)<sup>3</sup>.

For intensive care patients in the most serious condition, several tests can provide vital information:

- the BIOFIRE® Pneumonia *plus* Panel, particularly for patients on ventilators who have the highest rates of secondary bacterial infections;
- conventional microbiology tests, blood culture bottles, VITEK® and VITEK® 2 and ETEST® tests to determine antibiotic susceptibility and enable clinicians to optimize antibiotic treatment;
- the NEPHROCHECK® test can also be used to evaluate the risk of acute kidney injury (AKI) in adults in critical health condition. Several studies evaluating the use of NEPHROCHECK® in COVID-19 patients are currently underway.

bioMérieux addresses sepsis comprehensively, with solutions that characterize both the infection and the body's inflammatory response.

We offer the most extensive range of solutions on the market for sepsis diagnostics and management, combining immunoassay, microbiology and molecular biology tests.

### WHAT THE SEPSIS SOLUTION DOES:

#### 1. Identify the infectious agent and determine the appropriate antibiotic treatment with:

- BIOFIRE® panels for the rapid identification of a viral or bacterial infection before it becomes generalized. BIOFIRE® Blood Culture Identification Panel to identify 27 targets and antibiotic resistance markers in samples, in 1 hour.
- BIOFIRE® Blood Culture 2 (BCID2) panel. In 2020 the new generation of this panel received FDA clearance and was CE marked. It can identify 26 bacteria, 7 yeasts and 10 antimicrobial resistance genes in samples in 1 hour.
- Innovative BACT/ALERT® VIRTUO® system, the first fully-automated, scalable blood culture instrument, reducing by 30% the time required for the detection of microorganisms in patient blood samples.

■ Conventional and chromogenic culture media in the CHROMID® line to detect and identify a wide variety of bacteria that may cause sepsis.

■ VITEK® MS mass spectrometry system to rapidly identify the pathogen responsible for the infection based on a positive blood culture reported by BACT/ALERT® VIRTUO®.

■ VITEK® 2 automated identification and susceptibility testing system.

■ ETEST® manual antibiotic susceptibility testing range.

#### 2. Test, analyze and monitor the body's response with:

■ VIDAS® B•R•A•H•M•S PCT™ test to identify patients presenting a severe infection to ensure the efficacy of antibiotic treatment and to stop antibiotics as soon as possible.

■ NEPHROCHECK® test, operating on the ASTUTE140® METER platform, and the VIDAS® NEPHROCHECK® test, CE marked in late 2020 for the VIDAS® 3 system, which identifies patients at risk for kidney injury so that preventive measures may be taken.

#### 3. Optimize laboratory workflows with:

■ Lab Consulting solutions, which are designed to reduce the time required for blood culture bottles to arrive in the laboratory. Solutions are based on the analysis of sample flows in the laboratory to suggest organizational adjustments that improve operational efficiency and time-to-results.

■ MYLA® software to process microbiology data and ensure connectivity to several analysis instruments.

# INDUSTRIAL APPLICATIONS

Protecting consumer health is a priority for bioMérieux.

The Company offers the most extensive range of solutions for industrial microbiological control, with both manual and automated solutions, providing rapid and reliable results for companies in the food, biopharmaceutical and cosmetic industries. Our solutions cover all stages of analysis, from sample preparation to the final step of microorganism identification.

These solutions are used to determine the quality of raw materials, to perform controls of processes and the environment during production, and to test the quality of finished products. Their use is recommended to ensure food safety and quality (hygiene criteria) and the sterility of finished products.

bioMérieux aims to strengthen its leading position in the field of industrial microbiological control by launching new automated solutions and innovating in the field of data science, while also enhancing its existing lines.

## ENSURING PHARMACEUTICAL PRODUCT QUALITY

bioMérieux is a world leader in the field of industrial microbiological control with the most advanced offering to ensure the quality of pharmaceutical products during production.

The Company provides the pharmaceutical industry with a complete range of microbial contamination detection solutions that deliver rapid, relevant results to ensure product quality and protect patient safety.

Microbiological control for companies in the pharmaceutical industry prevents bacterial contamination of pharmaceutical products by monitoring:

- the quality of the environment;
- the raw materials and products used along the manufacturing chain;
- and finished products.



### An updated line of environmental monitoring solutions

bioMérieux has invested in updating its environmental monitoring portfolio by replacing manual solutions with digitized and automated ones. The launch of this offering was delayed by the pandemic, but got underway in late 2020 and will continue in 2021.

This new range comprises 3P® SMART PLATES Petri dishes for secure, digitized environmental monitoring, the 3P® CONNECT software suite and the 3P® STATION incubation and digitized reading platform for Petri dishes.

These solutions are compatible with the LIMS (Laboratory Information Management System) used by pharmaceutical companies to optimize the automated reading of Petri dishes for better results.



### BIOFIRE® MYCOPLASMA, an innovative test for mycoplasma detection

BIOFIRE® MYCOPLASMA detects mycoplasma, bacteria that may be present in biopharmaceutical products (antibodies, hormones, cellular or gene therapies, etc.), the most vibrant sector in the pharmaceutical industry. Some species of mycoplasma cause respiratory and genital infections. They are difficult to detect, representing a health hazard that creates significant risk during industrial production processes.

This first all-in-one molecular biology test requires only two minutes of hands-on time for results in less than one hour. It is easy to use, as the DNA extraction, amplification and detection steps are fully automated and may be performed outside of the laboratory by nearly anyone after simple training.

Initially launched in 2020 in the United States and in certain European countries over the course of the year, BIOFIRE® MYCOPLASMA has already won over key bioproduction customers. Ultimately, it is intended for the Advanced Therapy Medicinal Products (ATMP) market.

### ACCELLIX, a strategic partnership

In June 2020, bioMérieux acquired a minority stake in Accellix, a company based in San Jose, USA and Jerusalem, Israel. This biotechnology company has developed an innovative platform that enables to meet critical quality control customer needs in the field of cellular and gene therapy.

### COVID-19 : Working alongside industry to speed up vaccine development

Since early 2020, bioMérieux has been working to provide pharmaceutical companies working on COVID-19 vaccines with accelerated sterility control technologies. To do so, the Company is leveraging BACT/ALERT®, which provides automated blood culture solutions and internationally-recognized testing protocols for controlling bacterial contamination risks, and SCANRDI®, a scanning cytometry instrument for monitoring medical products.



### Detecting endotoxins

We continued the roll-out of the ENDONEXT™ range of endotoxin detection solutions in 2020. This range enables endotoxin testing in pharmaceutical grade water, injectable drugs and other pharmaceutical products.

It was enhanced by the launch of ENDONEXT™ software v1.0, specifically designed to analyze the results of bacterial endotoxin assays and a semi-automated solution that further simplifies workflows, limits handling time and reduces the risk of error.

## DIAGNOSTICS FOR FOOD SAFETY

The manufacture of food products is subject to very strict microbiological testing, which is carried out during the entire production process, from raw materials to finished products, as well as in the production environment.

For more than 25 years, bioMérieux has applied its experience acquired in clinical applications to the field of industrial microbiological control, for which it is the world leader.

Testing the microbiological quality of foods constitutes the historical basis of the industrial applications developed by bioMérieux. It is based on a host of solutions, ranging from sample preparation to pathogen identification, to ensure that food is absolutely safe for consumers.



**600 million people**  
fall ill each year  
after eating  
contaminated food.

**420,000 deaths each year**  
are caused by contaminated food.

**Children under 5 years of age**  
account for **40%**  
of the foodborne disease burden.

Source: <https://www.who.int/fr/news-room/campaigns/world-food-safety-day/2020>

## Molecular microbiology: recognized expertise, a springboard for innovation

In the demanding and highly-regulated segment of microbiological analysis of agri-food products, bioMérieux has the most extensive portfolio of certified and officially recognized methods.

The GENE-UP® system is an innovative real-time PCR\* solution that has been optimized to rapidly and accurately detect the most commonly occurring pathogens in food production, whether they are bacterial (such as *Salmonella*, *Escherichia coli*, Shiga toxin-producing *Escherichia coli*, *Listeria* and *Cronobacter*) or viral (such as *Norovirus*, hepatitis A and hepatitis E).

This automated system considerably simplifies laboratory workflows by improving productivity and limiting the risk of cross-contamination between samples.

In 2020, bioMérieux completed the roll-out, which began in 2019 of a new unit-dose format for its reagents that can be used with the entire GENE-UP® range. It further streamlines workflows for our customers, providing rapid and extremely precise results.

*Nutricia (part of the Danone group) is a leading global infant formula manufacturer.*

*Within Nutricia, very high standards are applied even higher than what the ISO recommends. GENE-UP® provided a complete solution to our challenge with excellent results, improving lab efficiency significantly. These gains delivered real value for Nutricia: the laboratory is now able to simultaneously test for a larger number of different pathogens in one run."*

**JEROEN TILBURG**

Team Lead Microbiology at Nutricia

## VERIPRO® SARS-CoV-2 ONE OF THE FIRST ENVIRONMENTAL ASSAYS TO BE VALIDATED TO FIGHT COVID-19

In December 2020, bioMérieux received the first COVID-19-related Certificate of Validation for its VERIPRO® SARS-CoV-2 Environmental Assay (PTM 122001) from AOAC INTERNATIONAL's\*\* Emergency Response Validation (ERV) program. This test, available only in the United States, was developed by Invisible Sentinel\*\*\* teams in collaboration with the Grenoble bioMérieux facility to meet industrial demand. It is used for environmental detection at food and beverage production facilities and hospitality industry sites to prevent transmission of the coronavirus.

The VERIPRO® SARS-CoV-2 Assay combines the advantages of real-time PCR technology with a streamlined environmental sampling protocol, providing rapid and accurate results in under two hours. Up to 96 samples per instrument can be run simultaneously.

## Predictive diagnostics: bioMérieux anticipates needs in the food industry

Predictive diagnostics uses tools for analyzing personalized data to identify the origin of a problem and implement solutions to prevent it from occurring again. It improves quality and efficiency for industry, helping to better manage food safety risks and facilitating proactive responses to prevent issues.

This innovative program, which entered the pre-launch phase in 2020, is a direct outgrowth of the New Era of Smarter Food Safety initiative introduced in the summer of 2020 by the FDA, laying the groundwork for end-to-end traceability in the food industry.

\* Polymerase Chain Reaction.

\*\* AOAC INTERNATIONAL is an American non-profit organization that brings together government, industry, and academia to establish standard methods of analysis that ensure the safety and integrity of foods and other products that impact public health around the world.

\*\*\* Company located in Philadelphia (United States) acquired by bioMérieux in 2019.

## A PORTFOLIO OF SERVICES BUILT AROUND CUSTOMER NEEDS

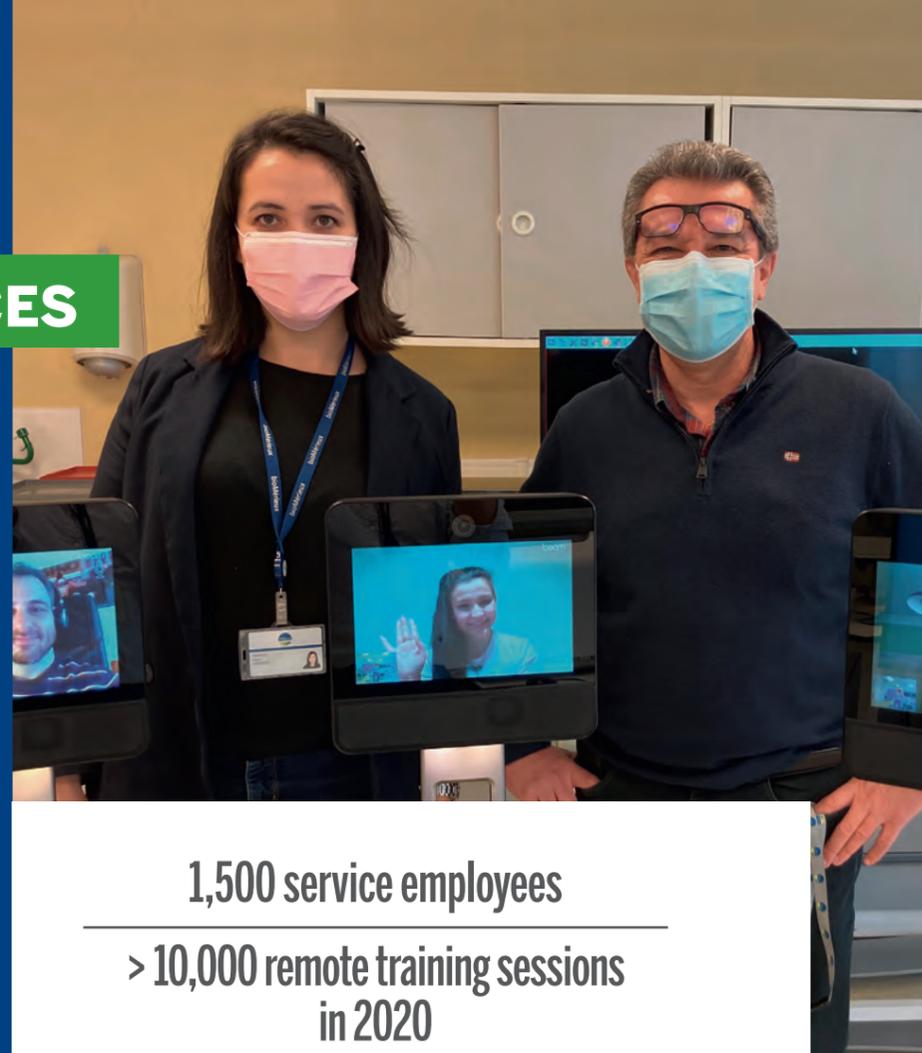
bioMérieux provides customers with a tailor-made and evolving portfolio of services that contributes to enhancing our customers' operational performance. In our approach, we put their satisfaction first: starting with pre-sales technical discussions and continuing through each step of installation, training, qualification processes and long-term follow-up to answer technical questions.

These services help ensure the optimal integration of instruments into laboratory workflows while maintaining the conditions of use over the long term, respecting quality regulations and supporting skills development through training and medical education initiatives.

Thanks to bioMérieux's worldwide presence, we are a true partner working in close proximity to customers operating in many different countries.

### CUSTOMER SERVICE ACTIVITY IN 2020

**+6.1%** growth including maintenance, service contracts and workflow audits



**1,500 service employees**  
**> 10,000 remote training sessions**  
**in 2020**  
 to support our customers through the pandemic

### Maintaining service continuity in 2020

Our customer service teams demonstrated exceptional adaptability and resilience, making it possible for our business activities to continue despite the challenges posed by the pandemic. Our teams maintained their activities in our sites, by teleworking or directly in laboratories and hospitals depending on the needs. The R&D and Quality Assurance departments helped implement business continuity plans around the world so that we could fulfill our contractual preventive and corrective maintenance obligations to our customers and prioritize the most urgently needed interventions.

To provide our customers and employees with the skills they need and ensure that our instruments are operated in the proper conditions at customer sites, we developed and deployed remote training programs, tutorials and an augmented reality maintenance solution (Remote Video Service). We significantly accelerated the ongoing digital transformation of our training portfolio. Thanks to the efforts of the technical and educational teams and the hard work of our employees, our subsidiaries were able to successfully launch new products. For instance, many countries and distributors were able to develop or reactivate their installed base of eMAG® and easyMAG® systems, used to perform DNA and RNA extraction to address the need for PCR tests that detect SARS-CoV-2.

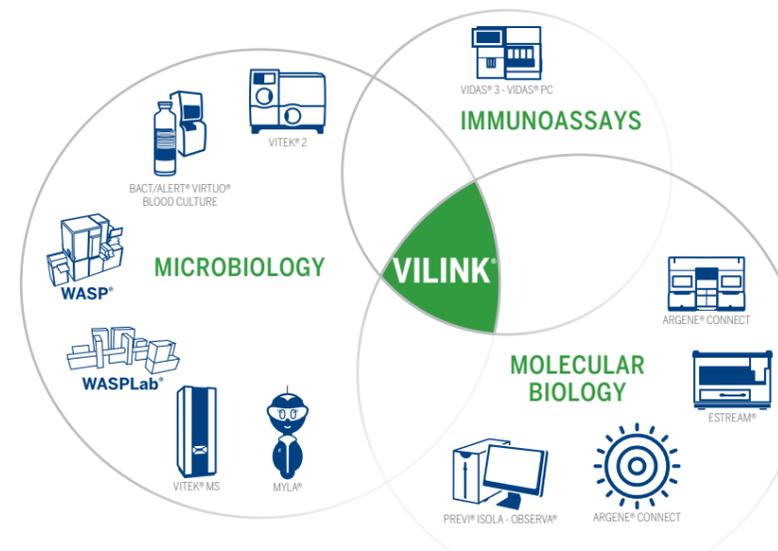
### Installed base and remote systems management

Our global and local customer service teams are integral to the management of our installed base, as they actively optimize sales data processing, ensuring that we are able to make the best-informed business decisions. These improved processes enable bioMérieux to manage obsolescence and cyber-security issues at the global level while conducting new product rollouts.

For several years, bioMérieux has been connecting all of its ranges through VILINK®, a solution that helps reduce intervention times, prevent extended interruptions to laboratory flows (remotely resolving or diagnosing system outages and anticipating visits to customer sites), monitor and update systems in real time and proactively support our customers. The VILINK® solution has been rolled out worldwide, with over 10,000 connected systems around the globe.

Launched in July 2020, the new version of VILINK® increased data security protections to comply with the main international regulations, such as the General Data Protection Regulation (GDPR) and the Health Insurance Portability and Accountability Act (HIPAA).

During the COVID-19 pandemic, VILINK® enabled our teams to reduce the number of site visits while maintaining excellent quality service. As a result, systems were still able to be put into production even when public health measures made site visits impossible. With VILINK®, systems delivering positive COVID test results were programmed to issue alerts.



Remote Video Service, our customer interface solution, helped reduce system downtimes by having customers resolve laboratory equipment outages themselves with expertise and advice provided remotely by bioMérieux teams.

### Continuous improvement of the customer experience

Our aim is to continuously improve how we handle questions and requests from customers. Our efforts to personalize our services and platforms and the rollout of our customer portal are part of this continuous improvement effort.

Our portal provides a number of services – for example, reporting and managing incidents with technical support teams; requesting a call-back; keeping records of appointments; creating and tracking orders; archiving invoices and even accessing bioMérieux product technical documents. A pilot version of this major project was launched in 2019 with 150 customers in India and Singapore. It was rolled out in Mexico, Chile, Argentina, Spain and Portugal in 2020 with over 570 customers. We plan to provide access to the customer portal in all the countries where we operate by 2022.

### A Supply Chain that is quick to respond

The bioMérieux Supply Chain faced many challenges in 2020 when it came to ensuring product availability and on-time delivery of orders worldwide, as the COVID-19 crisis caused major disruption to air transportation, customs and international shipping.

Our distribution centers provided uninterrupted service to our customers, however, and a special task force for SARS-Cov-2 diagnostic products was set up to ensure that these products were delivered successfully to every region of the world.

In 2020 we created a new network for equipment and spare parts deliveries in the Asia Pacific region and work was begun to expand our International Distribution Center in Saint-Vulbas, France.



**96.1%** of orders fulfilled, shipped and delivered on time, despite the challenges created by the pandemic.

# INNOVATION, OUR RESPONSE TO MAJOR HEALTHCARE CHALLENGES

At bioMérieux, innovation aims to reach two priority goals:

- increase the medical and predictive value of the results delivered by our diagnostic tests. This means helping doctors quickly choose relevant therapeutic strategies that are adapted to each patient. In the field of industrial applications, this enables us to limit and anticipate contamination risks to ensure the safety of consumers;
- improve laboratory workflow and optimize their overall operational performance.

The bioMérieux innovation strategy is built on a combination of:

- in-house research and development programs;
- multidisciplinary international collaborations with public and private organizations from the medical and scientific communities and biotechnology companies;
- strategic acquisitions to enhance our product portfolio with new technologies.



## OUR CHALLENGES IN THE CLINICAL SECTOR

### Combatting antimicrobial resistance (AMR)

Three-quarters of our R&D work focuses on AMR and over 80% of our product portfolio contributes to combatting antimicrobial resistance.

Our challenge is to enhance our portfolio with:

- diagnostic solutions to identify and characterize pathogens and understand the host response;
- software solutions that manage data (results, epidemiology, etc.) to deliver added value for microbiology laboratories and physicians (enhanced diagnostics) in order to improve patient care.

### Anticipating the growing demand for decentralized testing

bioMérieux develops innovative technological methods in the field of molecular biology and immunoassays to anticipate the growing demand for reliable, rapid and decentralized diagnostic testing from healthcare professionals working in close proximity with patients, including in their homes.

### Responding swiftly to epidemics

Thanks to our expertise in complementary diagnostic technology, our advances in DNA sequencing, our advanced data analysis tools and our highly-aligned organization, we are able to quickly respond to the urgent healthcare needs of populations, as we demonstrated in 2020 with the COVID-19 pandemic (see page 16).

### Growing our portfolio of immunoassay and molecular biology solutions

bioMérieux is investing in the development of new tests with high medical value on its VIDAS® 3 platform, which offers new features and improved automation.

The Company is also continuing its R&D efforts to develop new BIOFIRE® panels and enhance its ARGENE® range at a time when more and more laboratories are equipped with real-time PCR systems.

## OUR PRIORITIES IN THE INDUSTRIAL SECTOR

### Accelerating automated solutions and digitization

bioMérieux is constantly enriching its product offering in a context of increasingly stringent regulatory requirements for microbiological quality controls, the therapeutic revolution in bioproduction, and cell and gene therapies. For several years, the Company has been investing in key expertise for our bio-pharmaceutical customers: automation, digitization, connectivity and the acceleration of rapid microbiological contamination control methods.

### Developing predictive diagnostic solutions

In the field of agri-food product safety, we launched a predictive diagnostics program to transition from a detection model to a bacterial contamination prevention model. This program focuses on two main areas:

- genomics and sequencing, in order to better understand pathogens and their source;
- building predictive models using customer data to anticipate contamination risks.

OUR FLAGSHIP PROJECTS IN THE FIELD OF CLINICAL APPLICATIONS

Joint research laboratories



IN FRANCE

Since 2002, bioMérieux and the **Lyon Civil Hospitals (HCL)** have joined forces in two joint research laboratories within the Lyon-Sud and Édouard Herriot Hospitals.

Their joint 2020-2025 roadmap, established in 2019, focuses on three fields of research:

- innovative biomarkers for the diagnosis of severe bacterial infections in Pediatric Emergency and Neonatal Intensive Care Units;
- a transcriptomic method for evaluating the immune status of patients in intensive care and identifying those at risk of deterioration in order to provide personalized medicine. Immune testing using *ex vivo* stimulation complements this approach by characterizing the functionality of immune cells;
- prognostic markers of organ failure, especially kidney failure, evaluated in intensive care patients with multiple injuries whose profile is similar to that of sepsis patients.



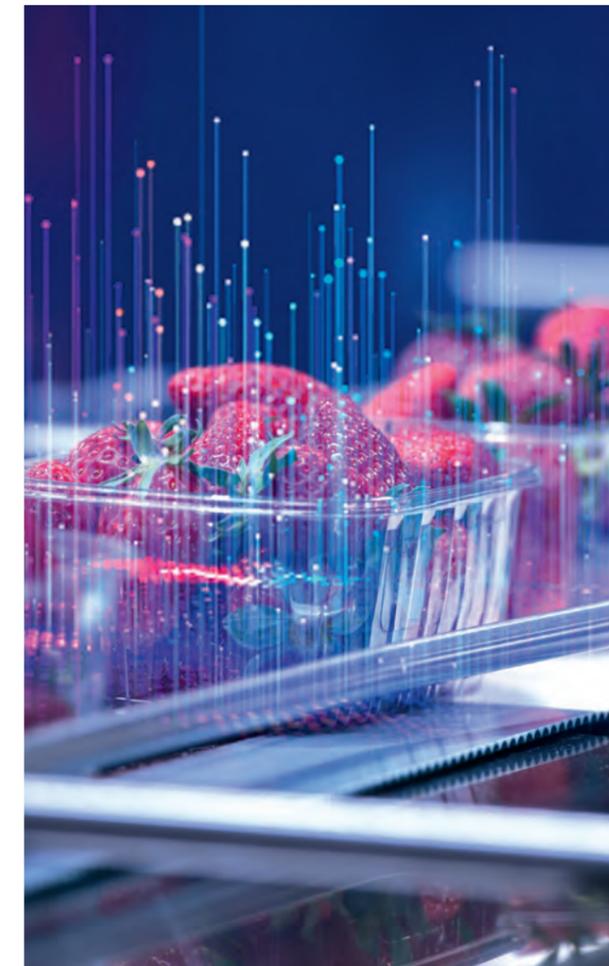
International studies

As part of projects funded by the European Commission and under the aegis of IMI\*, HORIZON 2020\*\* and EIT Health\*\*\*, bioMérieux is a partner in several key projects:

- The **COMBACTE-CDI** (COMbatting BACTERial resistance in Europe) project, dedicated to combatting *Clostridioides difficile* infections.
- The **VALUE-DX** project, whose aim is to shift medical practice towards more appropriate, personalized antibiotic prescriptions through the use of diagnostic tests. This study will utilize the BIOFIRE® 2.1 plus (RP2.1plus) Respiratory Panel, which includes SARS-Cov-2.
- The **BRAINI** (Blood biomarkers to improve management of mild traumatic BRAIN Injury) project, which aims to predict the risk of neurological complications of head trauma using a simple immunological test.
- The **DIAMONDS** (Diagnosis and Management of Febrile Illness using RNA Personalized Molecular Signature Diagnosis) project, which aims to develop a rapid test to distinguish viral from bacterial infections. This test could help limit antimicrobial resistance and improve care for patients, especially in pediatric emergency rooms.
- The **IMPACCT** (IMmune Profiling of ICU Patients to address Chronic Critical illness and ensure healThy ageing) project primarily aims to validate the clinical performance of a panel of immune biomarkers on its FILMARRAY® molecular biology platform.

\* Innovative Medicines Initiative.  
 \*\* European Research and Development Programme for the period 2014-2020.  
 \*\*\* European Institute of Innovation and Technology for Health, an independent European Union organization that drives innovation in the healthcare field.

OUR FLAGSHIP PROJECTS IN THE FIELD OF INDUSTRIAL MICROBIOLOGICAL CONTROL



When it comes to process optimization, bioMérieux is a partner of pharmaceutical customers thanks to the new 3P® range of culture media solutions. This range was designed to digitize and automate environmental controls, often performed manually and therefore time-consuming and prone to errors. The 3P® ecosystem is the product of a fruitful collaboration between the in-house R&D teams for systems, software and culture media. They joined forces with two outside partners, **Mirrha** and **Interscience**. The product range includes 3P® SMART PLATES, 3P® CONNECT and 3P® ENTERPRISE. For customers who want to move to the next level by adding automation, our R&D teams are finalizing the development of 3P® STATION, an automated incubation and real-time colony counting system.

bioMérieux leveraged new bioinformatics expertise in the agri-food R&D team to develop a predictive diagnostics solution. To better anticipate contamination risks, it will be possible to map the microbiome of a factory by combining molecular biology with genome sequencing, predictive models and cloud technology. The R&D teams (in biology, bioinformatics and big data) are working on a pathogen mapping solution to better understand the contamination pathways in the factory, which will improve risk management.

Partnership with the healthcare industry

In 2019, bioMérieux signed an agreement with **Entasis Therapeutics** through which the U.S. biopharmaceutical company will make use of the BIOFIRE® FILMARRAY® systems and BIOFIRE® Pneumonia Panels to optimize patient recruitment for a phase 3 global clinical trial (still in progress) of a novel antibacterial agent for patients with pneumonia and septicemia caused by the multi-drug resistant bacterium *Acinetobacter baumannii*.

Since 2019, bioMérieux is partnering with **Astellas**, a global Japanese pharmaceutical company, regarding the use of NEPHROCHECK® in a drug candidate phase 2 clinical trial to identify patients at risk for acute kidney injury (AKI) following cardiac surgery and to select those who potentially may benefit from this novel drug.

bioMérieux and **Baxter**, a world leader in the field of intensive care and dialysis, signed an exclusive distribution agreement for Europe and the United States in 2020 for the NEPHROCLEAR™ CCL14 test that is currently in development to predict the risk of severe, persistent acute kidney injury (AKI).

bioMérieux and **Sobi**, a leading Swedish biopharmaceutical company in the field of rare diseases are partnering for the development and commercialization of CXCL9 as a companion diagnostic test on VIDAS® to accompany Sobi's IFN $\gamma$ -blocking antibody emapalumab (Gamifant®) in potential treatment of Graft Failure post Hematopoietic Stem Cell Transplantation. VIDAS® CXCL9 has received breakthrough device designation by FDA in May 2020.

*This privileged collaboration between bioMérieux and the Lyon Civil Hospitals has ensured that together we could respond quickly to the COVID-19 crisis. We rapidly set up clinical tracking studies of medical staff and critical care patients infected with the SARS-CoV-2 virus to better understand the physiopathology of the infection and the immune response to the viral invasion (for instance: a compromised type 1 interferon response)."*

KAREN BRENGEL-PESCE

R&D Bio-science Director,  
 Joint research laboratory HCL-bioMérieux



IN CHINA

In 2019 a new joint research laboratory was created with the **Shanghai Children's Medical Center**. A clinical study of the NEPHROCHECK® test for the early risk assessment of acute kidney injuries in young children following cardiac surgery was conducted. In addition, a research project was launched, focusing on severe respiratory disease to assess diagnostic and prognostic markers.

# CORPORATE RESPONSIBILITY



Corporate Social Responsibility (CSR) has been part of our DNA. For more than 55 years, bioMérieux has been committed to fighting infectious diseases worldwide with a long-term vision for both our employees and outside stakeholders.

Given the growing expectations of our customers, and partners, the financial community, our employees and the people we recruit, in 2020 we formalized a new CSR ambition and defined the main focus areas where we are committed to strengthening our impact.

## COMMITTED TO BEING A SOCIALLY-RESPONSIBLE COMPANY, WITH A HUMAN-CENTERED VISION

Since 1963, bioMérieux has helped fight infectious diseases worldwide through *in vitro* diagnostics. We have always adopted a socially responsible, human-centered approach to business development in line with the values upheld by the Mérieux family.

Our public health mission means we have a particular responsibility to today's society and future generations.



### Human-centered governance

bioMérieux is a family company, founded by Alain Mérieux, and directed today by Alexandre Mérieux, CEO. The Company is 59% owned by the Institut Mérieux. The Fondation Christophe et Rodolphe Mérieux, created in 2001 under the aegis of Institut de France, is the reference Institut Mérieux shareholder, owning one third of its shares. Through Institut Mérieux, the Foundation receives a portion of the dividends distributed by bioMérieux. This means that the Company's profits contribute to fighting infectious diseases and aiding the most vulnerable people, including women and children, in disadvantaged regions.

### CSR governance: commitment starts at the top

Corporate Social Responsibility (CSR) is under the leadership of the Executive Committee of the Company and is the focus of regular presentations to the Board of Directors. At the start of 2020, in order to reinforce our actions and the visibility of our CSR commitment, bioMérieux appointed a CSR Director in charge of providing leadership and oversight for our CSR performance.

The Board of Directors and the Audit Committee are informed at least once per year about the CSR strategy and its corresponding risks. In June 2020, the Human Resources, Appointments and Compensation Committee became the HR and CSR Committee and its mission was expanded to include our CSR policy. From 2021 onward, the CSR Committee created in 2018 will be modified and ultimately replaced by quarterly reviews of the progress made by the bioMérieux Executive Committee on the CSR roadmap.

### Co-creating a CSR strategy

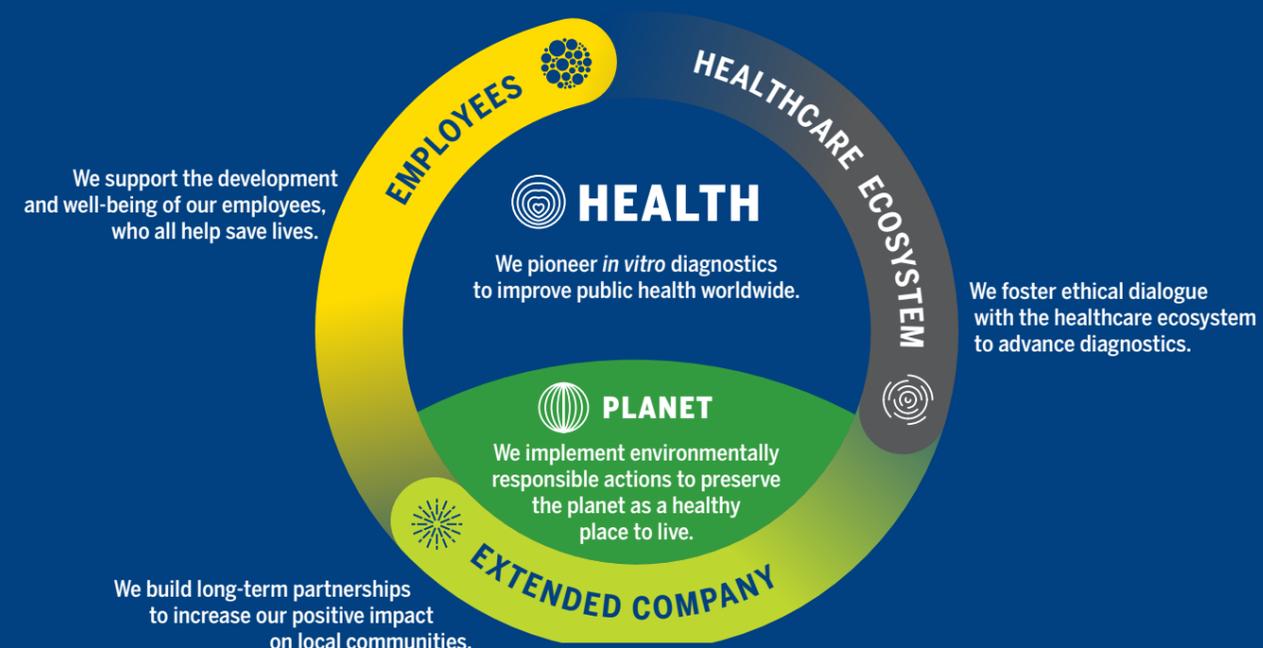
In 2020, bioMérieux consulted a panel of 26,000 internal and external stakeholders in seven countries<sup>1</sup>. The results were used to produce a materiality matrix and helped set new CSR ambitions. Starting in 2021, our CSR strategy will support in priority the 5 United Nations sustainable development goals (SDGs)<sup>2</sup>: 3, 8, 10, 12 and 13.

These efforts are consistent with bioMérieux's commitment to the United Nations Global Compact, which we have renewed our support for every year since 2003.

The new CSR strategy was co-created with all the major functions in the Company in an effort to align our teams' visions and integrate CSR into every level of our global strategy and operations. It is built on five pillars that address challenges related to our "business lines".



1. Brazil, China, France, India, Ivory Coast, South Africa and United States.  
2. <https://www.un.org/sustainabledevelopment>



### Rating agencies recognize our CSR policy

For a number of years now, extra-financial rating agencies have evaluated bioMérieux's CSR performance and included it in their SRI (socially-responsible investment) indicators.

In particular, bioMérieux has been evaluated by the following agencies: FTSE Russell (FTSE4Good Index), Gaïa Rating, CDP (Carbon Disclosure Project), Corporate Knights Global 100 index, Euronext Vigeo Eiris, Ethibel (Ethibel Sustainability Index (ESI) Excellence Europe), EcoVadis and Global Challenge Index.

### EXPERIENCE SHARING

In 2020, bioMérieux joined the Mix'R network in France, whose goal is to be an "agitator for responsible companies" by stimulating the collective intelligence and co-development of its members.

The Company is also a member of the Sustainable Development Commission led by the MedTech Europe professional network. AFIPRAL, an association which represents the pharmaceutical industry in the Rhône-Alpes Region of France, decided to create a CSR committee in early 2021, chaired by bioMérieux.

## IMPROVING PUBLIC HEALTH WORLDWIDE THROUGH DIAGNOSTICS

We address global healthcare challenges through our diagnostic solution.

We are committed to providing global health responses that improve the management of infectious diseases around the globe, in accordance with Article 25 of the Universal Declaration of Human Rights and Article 12 of the International Covenant on Economic, Social and Cultural Rights (ICESCR).



### AMR / AMS

#### FIGHTING AGAINST ANTIMICROBIAL RESISTANCE IN RESOURCE-LIMITED COUNTRIES

#### bioMérieux partners with the Fleming Fund to equip reference laboratories

In 2019, bioMérieux was selected to be a key supplier in a tender process organized by the Fleming Fund, a UK aid investment program to tackle antimicrobial resistance in resource-limited countries.

In 18 countries in Africa and Asia Pacific, the Company's mission is to equip one clinical reference laboratory and one veterinary reference laboratory with the VITEK® MS and VITEK® 2 systems for pathogen identification and susceptibility testing, and with MYLA® software for data processing.

In 2020, despite the challenges posed by the COVID-19 pandemic, many instruments arrived at their final destinations and the laboratories, especially the veterinary ones, were nearing completion the start of 2021. Nepal is the first country to routinely use the bioMérieux solution named above.

The analyses performed in these laboratories will contribute to establishing robust antimicrobial resistance surveillance systems and providing data on pathogen resistance trends. This information should improve patient care and contribute to the development of effective national antimicrobial resistance policies. Moreover, the data collected by reference laboratories using the Global Antimicrobial Resistance Surveillance System (GLASS) developed by World Health Organization (WHO) will improve the understanding of the extent of the phenomenon of resistance and how it spreads, as well as the geographic areas where antimicrobial resistance poses the greatest risk.

#### MEASURING THE IMPACT OF ANTIMICROBIAL STEWARDSHIP PROGRAMS IN HOSPITALS

In 2020, bioMérieux renewed its support for the Global Point Prevalence Survey (GLOBAL-PPS)\* coordinated by Professor Herman Goossens and Dr. Ann Versporten of the University of Antwerp (Belgium).

This study, which began in 2015, enables hospitals around the world to compare their antibiotic consumption and bacterial resistance rates. It is part of an effort to use antibiotics more responsibly and helps slow the progression of antimicrobial resistance.

In 2020, there was a marked reduction in hospital participation, as these institutions were occupied with managing the pandemic. In light of this, the decision was made to collect SARS-CoV-2 data and analyze the consolidated information.

Professor Herman Goossens's team took advantage of this time to develop new tools and write articles to encourage hospitals to continue participating in the project. In addition, they redesigned the study website ([www.global-pps.com](http://www.global-pps.com)), making it more interactive.

The section on healthcare-associated infections (HAI) was expanded in the input module and will help hospitals to address this challenge.

Furthermore, numerous studies worldwide have been designed to measure the percentage of bacterial co-infections among patients hospitalized for COVID-19, even though a documented overuse of antibiotics has resulted in recommendations (WHO, CDC, professional societies) encouraging practitioners to refrain from prescribing antibiotics unnecessarily for this viral infection.

The data collected through the GLOBAL-PPS are expected to help raise awareness.

A total of 16 scientific publications, including six in 2020, have resulted from the GLOBAL-PPS.

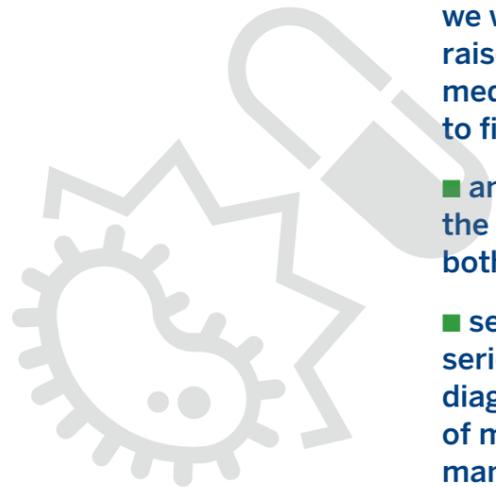
#### CARE, a multi-sponsor program in China

China Against drug REsistance, initiated in 2013 by the Mérieux Foundation, receives support from bioMérieux, which oversees its implementation. This program, which is based in particular on the GLOBAL-PPS, provides a standardized tool (quality indicators) to help hospitals improve their antimicrobial stewardship programs and control healthcare-associated infections in order to limit the spread of antimicrobial resistance in China.

In 2016, the first point prevalence survey was conducted in four clinical departments of the First Affiliated Hospital of Zhejiang University in Zhejiang Province. In 2019, the CARE program was expanded to nine hospitals in eight Chinese provinces. Due to the COVID-19 pandemic, no new hospitals joined the program in 2020, but one of the nine existing ones was surveyed for the second time.

True to our public health mission, we work to develop diagnostic solutions, raise public awareness and provide medical training to health professionals to fight against:

- antimicrobial resistance and the overuse of antibiotics, harmful to both health and the environment;
- sepsis, an often under-recognized serious clinical condition, for which rapid diagnosis contributes to reduce the risk of mortality and provides better management of critical care patients.



\* bioMérieux is the exclusive private sponsor of the Global Point Prevalence Survey. The Company funds the survey but plays no role in the study design, selection, analysis and interpretation of data nor in drafting the report. The data, which are strictly confidential, are stored anonymously at the Coordination Center of the University of Antwerp.

## OUTREACHING PUBLIC, EDUCATING AND TRAINING HEALTHCARE PROFESSIONALS

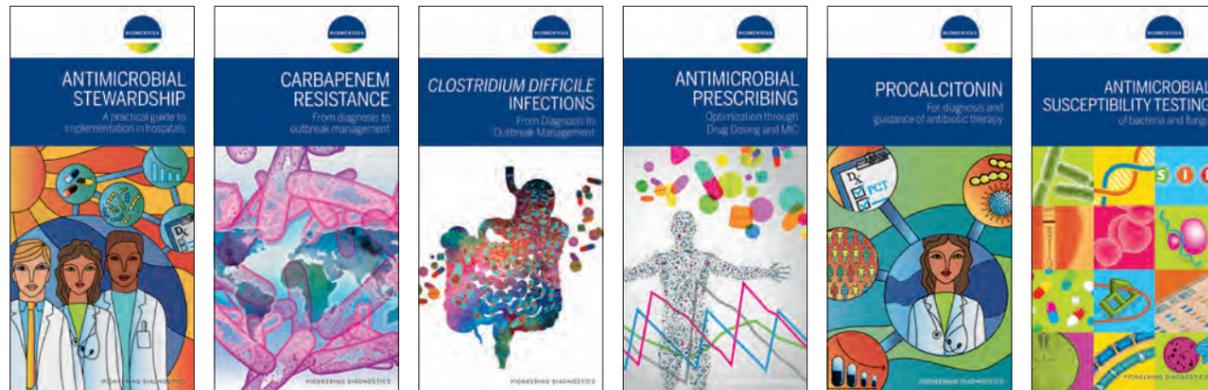
### World Antimicrobial Awareness Week (WAAW)

Each year we support this WHO initiative and use the annual campaign as an opportunity to raise employee awareness.

#### Educational site

Our educational site on antimicrobial resistance is designed to increase awareness of the major health challenges created by antimicrobial resistance, to educate on the appropriate use of antibiotics and to demonstrate the essential role of diagnostic testing to curtail this public health threat worldwide.

[amr.biomerieux.com](http://amr.biomerieux.com)



#### Educational tools

bioMérieux publishes a series of manuals for laboratories and clinicians. In 2020, a new practical guide was added to the collection, bringing the total to 12 publications, including six on the proper use and prescribing of antibiotics. These tools, dedicated to healthcare professionals, are now available in the “Education” section of our [www.biomerieux.com](http://www.biomerieux.com) website.

We also produce a selection of publications about antimicrobial resistance and antimicrobial stewardship (AMS) for our customers.

In 2020 bioMérieux awarded scholarships to support several medical education initiatives on the topic of antibiotic resistance and antimicrobial stewardship (AMS):

- a webinar and a training module from the British Society for Antimicrobial Chemotherapy (BSAC);
- a webinar from the International Society for Infectious Diseases (ISID);
- webinars for Center for Infectious Disease Research and Policy (CIDRAP).



### COOPERATION AGREEMENT WITH CIDRAP

In January 2020, bioMérieux renewed its commitment to the Center for Infectious Disease Research and Policy (CIDRAP). We sponsored two webinars on the value of diagnostics in Antimicrobial Stewardship, in Europe and the United States and then in Latin America. bioMérieux also participated in the redesign of the CIDRAP website and weekly newsletter to promote content related to antimicrobial resistance.

### Collaboration agreement in Ivory Coast

In June 2019, we marked the occasion of the inauguration of the bioMérieux Training Center in Abidjan for healthcare professionals by signing a three-year memorandum of understanding with the Ivory Coast. The aim is to fight antimicrobial resistance through the operational implementation of educational, training and communication initiatives.

Since the memorandum was signed and the training center opened, 97 laboratory technicians have received specialized training on blood culture, identification and antibiotic susceptibility testing to help fight antimicrobial resistance.

### OUR PARTICIPATION IN INTERNATIONAL BODIES

Recognized for our expertise in the field of diagnostic testing for infectious diseases, we are actively involved with the following international bodies that are working to combat antimicrobial resistance:

- signatory to the 2017 Declaration on Antimicrobial Resistance at the World Economic Forum in Davos (Switzerland);
- participant in the 2017 AMR Industry Alliance and representative of the diagnostics industry on its Board of Directors. As an active member, in 2019, bioMérieux participated in the survey on which the Alliance based its 2020 Report;
- voting member of the American Presidential Advisory Council on Combating Antibiotic-Resistant Bacteria (PACCARB);
- member of the working groups of AdvaMed (Advanced Medical Technology Association) and MedTech Europe (European trade association for the medical technology industry);
- leader of the French “Antibiorésistance” project of the Industrial and Governmental Health Strategy Committee.

### COMMITTED ALONGSIDE OTHER INDUSTRIAL PLAYERS

In November 2020, bioMérieux signed a Memorandum of Understanding with Pfizer in Singapore to provide healthcare professionals with specialized knowledge and skills in infectious disease diagnostics. We support training programs on antimicrobial resistance in partnership with medical associations and hospitals.

### SEPSIS

#### FIGHTING SEPSIS AND IMPROVING THE MANAGEMENT OF INTENSIVE CARE

### Our support for the Global Sepsis Alliance (GSA)

bioMérieux is a member of this not-for-profit organization, which has clearly identified diagnosis as “one of the most effective weapons” to combat sepsis. The GSA supports healthcare professionals across the globe to improve care for patients with sepsis, aiming for a 20% reduction in sepsis deaths between 2010 and 2020.

Each year, bioMérieux conducts public outreach initiatives as part of World Sepsis Day.

### Our contributions to training and webinars

In 2020, bioMérieux Latin America partnered with the Pan American Association of Infectious Diseases (API) and the Pan American Federation of Critical Medicine and Intensive Care (FEPIMCTI) to develop a medical continuing education program in English titled “Current Challenges in the Management of Sepsis.” This program comprises two modules, 26 webinars and 22 international speakers from 13 different countries and culminates in two medical professional development certificates.

bioMérieux also sponsored a webinar called “Is COVID-19 Sepsis?” by Professor Mervyn Singer from University College London (UCL).

We produced a selection of scientific publications in early 2021 on procalcitonin: “Procalcitonin-Guided Antibiotic Therapy” as well as a manual with clinical cases from global experts about the medical value of procalcitonin to promote antibiotic stewardship.

On the topic of acute kidney injury (AKI), we also supported the ReachMD training programs, and webinars for the International Vicenza Course and KDIGO, and produced a series of scientific publications for our customers.



## LOWERING OUR ENVIRONMENTAL IMPACT

At bioMérieux we are aware of our responsibility when it comes to environmental challenges. Our aim is to mitigate environmental risks and minimize our carbon footprint.

The “2020 HSE Vision” program, created in 2015, set ambitious objectives to protect the environment - objectives that we have now surpassed.

Managed and monitored by a global Health, Safety and Environment Committee, chaired by the Chief Executive Officer, “2020 HSE Vision” is aligned with our Corporate strategy. Building on this policy, we launched an effort to set environmental goals and develop our roadmap for the next five years, focusing on three priority areas:

<p>promoting eco-design and optimizing the life cycle of our products</p>	<p>reducing greenhouse gas emissions by adopting a carbon trajectory aligned with the 2015 Paris agreement to help combat global warming</p>	<p>managing resources, raw materials and waste responsibly</p>
---	--	--

In 2020, despite the fact that the figures are biased due to the exceptional business activity resulting from the COVID-19 pandemic, our energy and water consumption and greenhouse gas emissions increased less than the growth of our business activity, as was the case in previous years.

Optimization of the Supply Chain and manufacturing processes resulted in an overall decrease in waste generated since 2019.

2020 HSE VISION			
2020 TARGETS			
 <b>20%*</b> reduction in our energy consumption	 <b>25%*</b> reduction in waste generation	 <b>20%*</b> reduction in water consumption	 <b>20%*</b> reduction in GHG emissions**
2015 BASELINE			
<b>ENERGY</b> 106 MWh/€M	<b>WASTE</b> 5.5 T/€M	<b>WATER</b> 302 M <sup>3</sup> /€M	<b>CO<sub>2</sub></b> 34 T/€M
2020 PERFORMANCE			
70 MWh/€M	3 T/€M	213 M <sup>3</sup> /€M	21 T/€M
<b>-33%*</b>	<b>-46%*</b>	<b>-29%*</b>	<b>-39%*</b>

\* Compared with 2015 (reference year). \*\* On Scope 1 (direct emissions) and Scope 2 (indirect emissions – owned).

### ISO 14001 Certification

Our ambition is for all bioMérieux industrial sites to earn ISO 14001 certification. At the end of 2020, nine sites were ISO 14001:2015 certified: Marcy l'Étoile, Craponne, La Balme, Saint-Vulbas, Combourg, Grenoble and Verniolle (France), Tres Cantos (Spain) and Florence (Italy).

The Durham, St. Louis and Lombard (United States) sites will achieve ISO 14001 certification in 2021, one year behind the initial target due to the COVID-19 crisis.

The bioMérieux Spain and bioMérieux Italy commercial subsidiaries have also received ISO 14001 certification.

### Energy savings

Energy management systems operate at our main sites. Today, over half of the electricity consumed by our European sites comes from renewable sources.

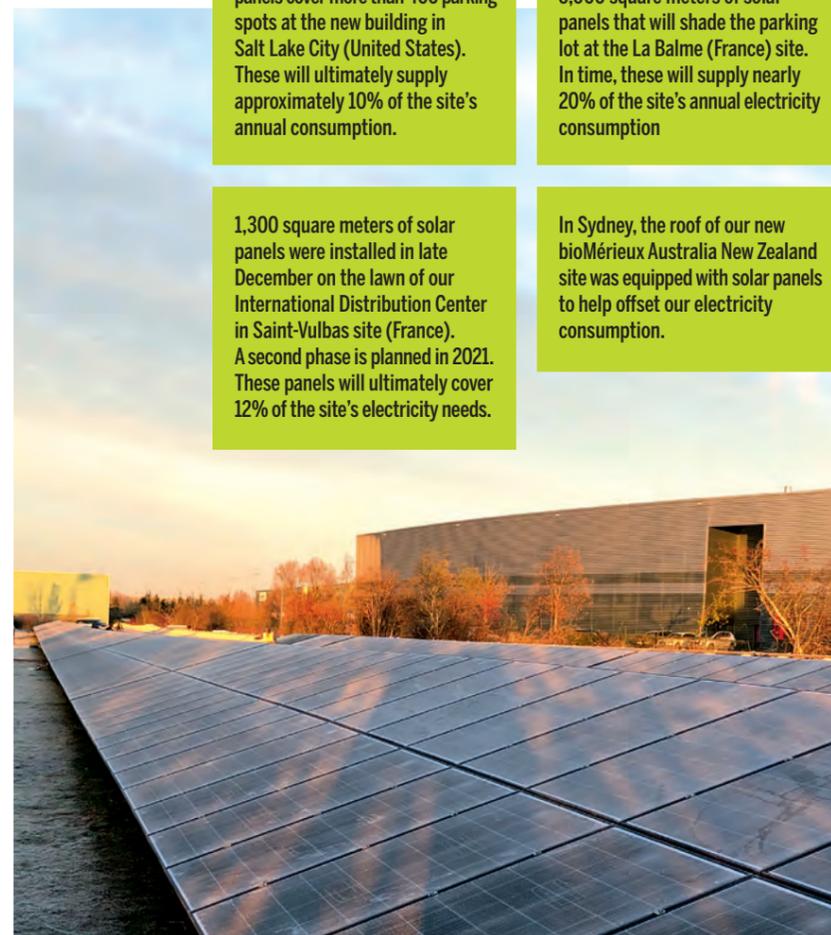
In 2020, the installation of new solar panels at several of our sites around the world got underway, with the aim of producing a portion of the electricity we consume. The new installations join the existing ones at the Durham site (United States) and Sint Martens Laethem site (Applied Maths in Belgium).

Over 5,000 square meters of solar panels cover more than 400 parking spots at the new building in Salt Lake City (United States). These will ultimately supply approximately 10% of the site's annual consumption.

Construction is underway for 5,000 square meters of solar panels that will shade the parking lot at the La Balme (France) site. In time, these will supply nearly 20% of the site's annual electricity consumption.

1,300 square meters of solar panels were installed in late December on the lawn of our International Distribution Center in Saint-Vulbas site (France). A second phase is planned in 2021. These panels will ultimately cover 12% of the site's electricity needs.

In Sydney, the roof of our new bioMérieux Australia New Zealand site was equipped with solar panels to help offset our electricity consumption.



### Product lifecycles and eco-design approach

We have implemented an eco-design approach for our products that is based on judiciousness, both in terms of the choice and utilization of materials and the energy and water consumed to manufacture and commercialize our diagnostic systems. The aim is to think about manufacturing, transportation, use and end-of-life of our products as part of a sustainable development approach.

Following the environmental life cycle analysis of VIDAS® conducted in 2019, the same process was initiated in 2020 for the VITEK® range. In addition, we performed an end-of-year analysis on all our ranges in order to determine practical ways of improvement. This helped us identify best practices in key areas such as storage temperatures, chemical hazards and the instruments' energy consumption.

### Optimizing transportation and distribution

bioMérieux works closely with suppliers and logistics providers to reduce the carbon footprint due to distribution.

Since 2017, for certain long-distance shipments, maritime transportation has begun to replace air transportation: the Company, which committed to increasing the share of maritime transportation compared to air transportation by 20% by 2020, has now significantly surpassed this target. In late 2019, maritime transportation accounted for 34% of the total. This percentage remained steady at 32% in 2020, a time when global access to transportation was extremely challenged and the importance of rapid deliveries to meet emergency needs was vital.

### MOBILIZING EMPLOYEES ON BEHALF OF THE PLANET

As part of bioMérieux's 2020 HSE commitments, around 30 employees - the winners of a challenge held during summer in honor of World Environment Day - took part in a Climate Collage workshop. This collaborative workshop uses an engaging collective intelligence - based activity to raise awareness about climate change. This initiative will be extended in 2021.

Due to the pandemic, bioMérieux was unable to take part in World Cleanup Day this year. However, we did launch a campaign to clean up data stored in email inboxes and personal storage spaces. In all, 1,448 employees in 41 countries took part in this first round. To keep the momentum going, we provided a digital best practices guide, applicable in the workplace and at home, to all our employees.

## RESPECT FOR ETHICS IN OUR INTERACTIONS



bioMérieux engages in dialogue with patients, consumers, healthcare professionals and governmental and institutional organizations to advance diagnostic testing for infectious diseases, while upholding respect for ethics in business and regulations, and ensuring responsible data management.

### Public and government affairs

In 2018, bioMérieux created the Public and Government Affairs function, whose aim is to gain recognition from public decision makers, and health authorities in particular, about the medical and economic value of in vitro diagnostics, especially when it comes to the fight against antimicrobial resistance, epidemics and emerging pathogens, and in the field of food safety.

The values bioMérieux has developed since it was founded have been passed down from generation to generation and are based on respect for principles, directives and procedures that meet the most rigorous standards of integrity. This same spirit motivated bioMérieux to develop our own Charter of Public and Governmental Affairs, which describes the responsibilities of this function and our commitment to guaranteeing equitable and transparent dialogue with public authorities (available online at [www.biomerieux.com](http://www.biomerieux.com)).

### WE RELY ON TRADE ASSOCIATIONS SUCH AS:

**Advanced Medical Technology Association (AdvaMed)**, an American association that promotes policies fostering the highest ethical standards, rapid product approvals, appropriate reimbursement and access to international markets;

**Syndicat de l'Industrie du Diagnostic In Vitro (SIDIV)**, a trade association that represents manufacturers from this sector in France. Isabelle Tongio, Vice President Public and Governmental Affairs at bioMérieux, was re-elected in 2020 to a second one-year term as Chair of SIDIV;

**MedTech Europe**, a European trade association for the medical industry. Yasha Mitrotti, Executive Vice President for bioMérieux's Europe-Middle East- Africa region is a member of the Board and Isabelle Tongio, Vice President Public and Government Affairs at bioMérieux, is a member of its Public Affairs Committee;

**AMR Industry Alliance**, a global initiative for life sciences companies (pharmaceutical industry, in vitro diagnostics, biotechnology and generics) created to respond to the United Nations' call in 2016 to tackle antimicrobial resistance.

Jean-Louis Tissier, Vice President Public and Government Affairs-AMR at bioMérieux is a member of the Board.

bioMérieux is also a member of **G5 Santé** and the **Association Française des Entreprises Privées (AFEP)**.

### Patient relations

In September 2020, bioMérieux launched an initiative to improve patient relations with a two-fold objective: to raise awareness with patient associations about diagnostics and to include and value the experience of patients in our ongoing efforts to develop innovative solutions.

This initiative is built on three pillars:

- collaborating with patient associations in the countries where we operate. For instance, we actively support (financing and organization of workshops) the creation of Europe's first AMR patient group (<http://healthfirsteurope.eu/topic/amr-patient-group>);
- integrating the patient's perspective for our innovation strategy through the creation of a representative Patient Value board;
- raising our employees' patient value mindset through our events and internal communications.

### Protection of personal data

bioMérieux has implemented and monitors a compliance program for the protection of personal data. The Company manages several different categories: employee data, patient data and our partners' administrative data - in particular that of customers, suppliers, distributors and healthcare professionals.

As of the end of 2020, a network of around 60 data privacy representatives is active at all Company sites and subsidiaries and the global functions. The network serves as the interface between the Data Protection Officer (DPO) and the business entities, particularly as concerns compliance with the General Data Protection Regulation (GDPR).

Every employee accessing personal data receives training and must adhere to the principles of these regulations. In addition, an online GDPR training program educates employees about their rights.

In 2020, a new tool was introduced to enhance bioMérieux's compliance with existing regulations concerning the protection of personal data. This solution enabled us to:

- more accurately document handling of personal data;
- standardize the methodology and practices;
- assess the potential impact of new projects as of the design phase (the concept of privacy by design);
- reduce the risk assessments associated with the handling of personal data;
- manage potential data breaches more quickly;
- make the DPO more visible through consolidated dashboards.

### Ethicsline: a dedicated global hotline

Any employee faced with an ethics question may contact a Compliance Officer. Worldwide, employees can call a local hotline to speak to someone in their local language, or send an email to a dedicated address to report any situation giving rise to concern. This system has been rolled out in all 44 countries where we operate and made available to customers and distributors.

bioMérieux has made all the necessary modifications to its procedures and tools to include the corporate whistleblower status created in France by the Sapin II Act and the French law on the corporate duty of vigilance.

### Preventing corruption and influence peddling

Risk mapping has been undertaken within each subsidiary so that procedures to manage risks related to corruption and influence peddling may be improved and strengthened. In 2019, a global risk reduction action plan was developed for each subsidiary. A new process was introduced globally to identify third parties associated with a high risk of corruption. The deployment of a certification program for distributors of bioMérieux products that began in 2019 continued in 2020. Each new distributor must adhere to the program.

In compliance with French law on the corporate duty of vigilance, bioMérieux published its vigilance plan for the first time in 2020. It describes in detail the environmental, health and safety and human rights risks affecting the Company and its primary subcontractors and the measures put in place to prevent and mitigate these risks. For bioMérieux, this plan constitutes a tool for consolidating and enhancing the proactive implementation of our risk prevention and management processes in these three areas. It also provides an opportunity to enhance due diligence with our subcontractors as part of our continuous improvement approach.

### Employee training

Training is one of the primary ways we build awareness among all bioMérieux employees about international rules and in-house procedures to promote respect for ethics and compliance.



A mandatory annual training program is attended by all employees, in addition to modules tailored to their specific function and risk exposure. Within the first few months of joining the Company, new hires receive training on the Global Code of Conduct, the Corruption Prevention Manual and the conflicts of interest policy. Each year, employees must validate a certificate of compliance with the rules of the Code of Conduct.

In 2020, nearly 27,000 on-line training modules were provided to employees across all subsidiaries, including courses on the Code of Conduct, fighting corruption, and managing relationships with third parties. Training courses on the codes of ethics of several different trade associations representing medical technology suppliers\* were also offered.

\* AdvaMed, MedTech Europe and Mecomed.

### Tax policy

bioMérieux operates in more than 160 countries. The Company implements a responsible tax policy in compliance with applicable local and international rules.

## PROMOTING SUCCESS AND WELL-BEING AT WORK

At bioMérieux, our employees are our greatest asset. Their professional development, safety and well-being in the workplace represent a strategic and societal priority.

In a context of sustained growth, bioMérieux implements a dynamic social policy to support all our employees on their career path and leverage their commitment. With 74% of our workforce located in France and the United States, these two countries are the benchmark and the drivers of the socially responsible policy that we seek to apply to all our employees worldwide.



### HIRING TALENT

We maintain close ties with schools and academic institutions in France and around the world to attract graduates and scientists who have the skills and expertise to keep pace with our evolving career tracks. We strive for diversity in our hiring practices.

## Our partnerships with schools and academic institutions

### IN FRANCE

Since 2015, bioMérieux has partnered with **EMLYON Business School**. We were one of the first companies to join the Global Business Network, which brings together major international businesses that are partners to the school. We also support the development of research projects conducted by the French Corporate Governance Institute (IFGE), EMLYON's research center and social laboratory dedicated to corporate governance issues.

bioMérieux is also a founding member of the **Fondation Université Grenoble Alpes (UGA)** created in 2014. This foundation supports top-notch research and training projects and promotes equal opportunity. In 2019, the Company renewed its commitment with the Fondation UGA for five more years. Since 2015, bioMérieux has also participated in the "Health 4 Life" Master's Excellence program at the UGA by funding international studies scholarships for top students in the field.

In 2020, bioMérieux renewed its philanthropic agreement with the **Fondation INSA Lyon** (*Institut National des Sciences Appliquées*) for another five years. A member of the Founder's Circle, the Company sits on the Foundation's Board of Directors as a Qualified Personality. Our partnership involves providing scholarships to help students continue their education, developing the biosciences and information technology education departments and promoting the *Fondation INSA Lyon*, which supports a human-centered educational program for engineers. Each year, bioMérieux hosts interns from the school, organizes career conferences there and participates in the INSA Business Forum.

Building on this partnership, bioMérieux has become a corporate partner of the **UNITECH programme** for academic excellence. This program brings together eight European universities and around 20 partner businesses. It allows us to help select the best engineering students and take part in their training, with a strong focus on international outreach and new technologies. The Company is able to suggest study projects, offer internships and recruit candidates over the course of their studies.

We also have longstanding partnerships with the **Graduate School of Biology-Biochemistry-Biotechnology (ESTBB)**, one of the schools of the science faculty of the **Université Catholique de Lyon**. bioMérieux meets with school administrators and educational directors to help develop the programs' curriculum in line with the new skills required by businesses. For the 2019-2020 academic year, we hosted 20 ESTBB students for internships and work-study programs.

In France, bioMérieux opens its doors to young people through a wide range of options, in an effort to help integrate them into the workforce:

- job shadowing internships for high school students;
- pharmacy student internships;
- international internship program (V.I.E): in 2020, 18 young people took part in this program;
- internships and work-study: 191 interns and 170 work-study candidates (with qualifications ranging from a high-school diploma to a graduate degree) were taken on in 2020.

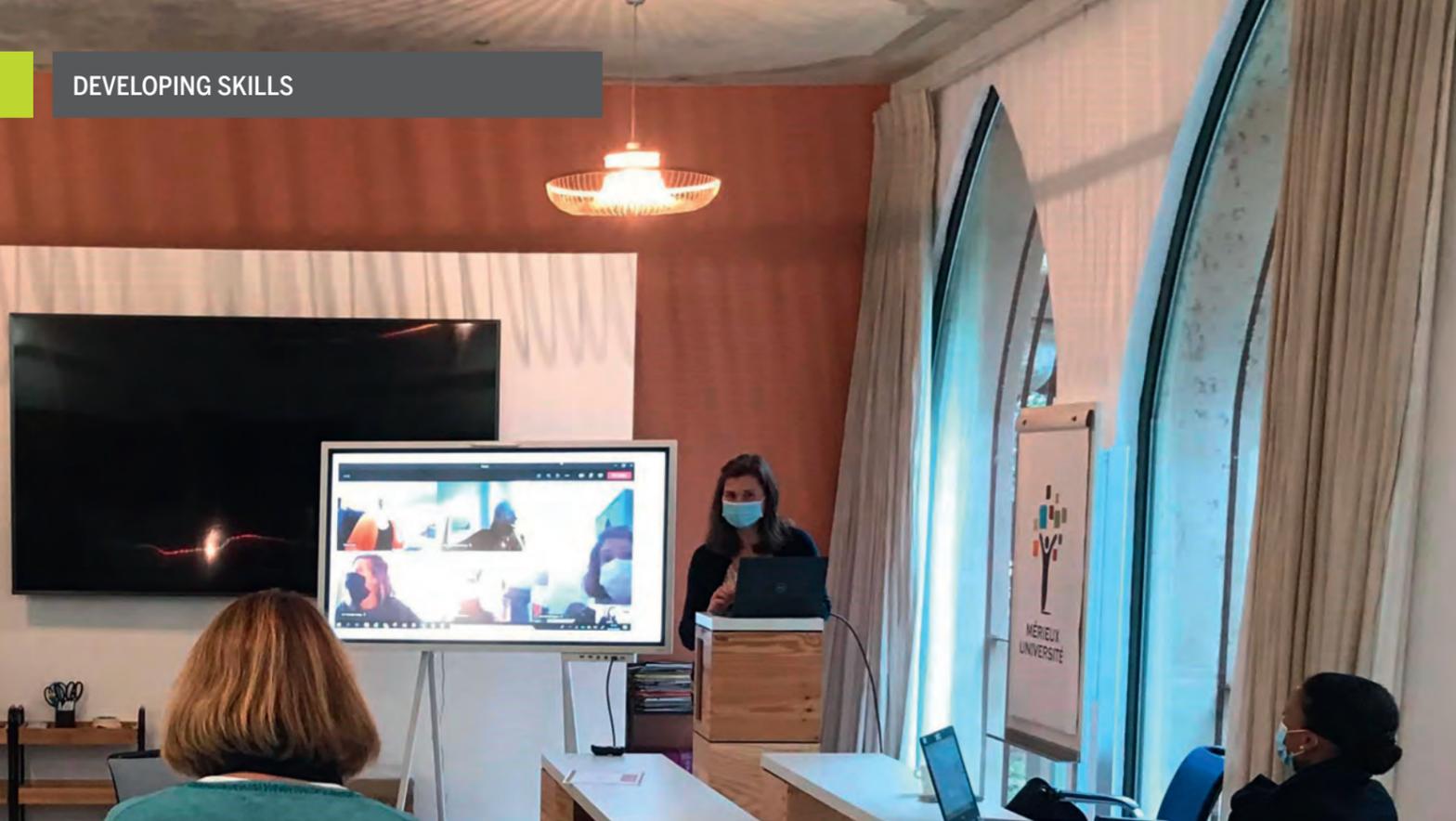


### IN THE UNITED STATES

**In Durham (North Carolina)**, bioMérieux has forged partnerships with local colleges and several leading universities including the University of North Carolina, North Carolina State University and Duke University. We also sponsor North Carolina State University's Biomufacturing Training and Education Center (BTEC) and award scholarships to two students annually. Our Durham site has a highly successful internship program.

**At our Saint-Louis site (Missouri)**, bioMérieux employs work-study interns and Co-Ops from Washington University, St. Louis University and other universities in the state of Missouri.

**In Salt Lake City (Utah)**, BioFire Diagnostics partners with a number of colleges and universities, including the University of Utah, Brigham Young University, Weber State University, Utah State University and Salt Lake Community College. At the University of Utah, we sit on the advisory board of the College of Computing, providing career coaching for students and partner with their chapter of the National Society of Black Engineers and the Society of Women Engineers. At Salt Lake Community College, we helped define the curriculum for their medical device certification program that was recently rolled out at area high schools as part of Utah's Medical Innovations Pathways program.



138,665 hours of training in 2020,  
equal to 11 hours per employee\*

Percentage of employees with access to training: 92%

24,909 hours of training provided by Mérieux Université  
to 2,997 bioMérieux employees

bioMérieux believes that supporting employees through training and career development is a worthwhile investment.

The Company has two systems in place to meet training needs: an in-house structure that provides local and regional employee training, and Mérieux Université, a corporate university that offers a variety of courses to all 20,000 employees of the Institut Mérieux Group.

bioMérieux's subsidiaries create their own programs for job and skills management planning based on the Company's strategic plan. All employees are eligible for training, no matter their position. Training programs target key areas:

Learning new job skills to keep pace with market trends, technologies and digitalization

Strengthening managerial practices in line with the bioMérieux culture and adopting an intercultural approach

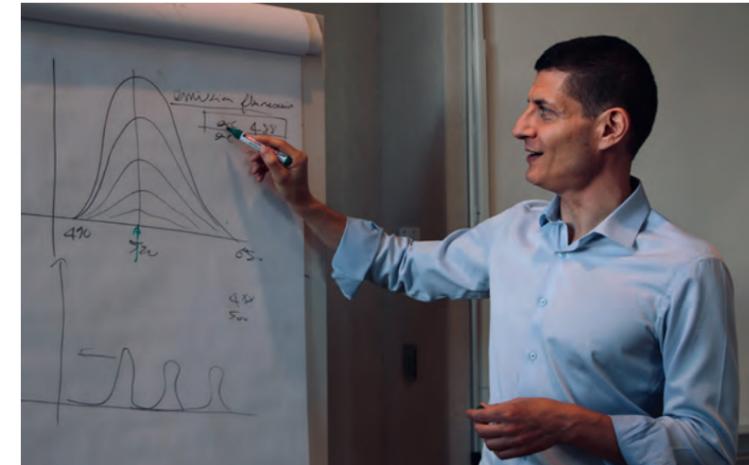
Mérieux Université, established in 2014, provides training to Institut Mérieux Group employees and ensures the transmission of a strong entrepreneurial culture, while helping to build bridges among its different entities. Its teams are active around the world, providing core training courses.

Our priority is blended learning, which combines complementary remote learning and face-to-face training approaches. In 2020, we stepped up the roll-out of e-learning offerings.

\* The number of hours decreased due to the sanitary crisis.

Mérieux Université's e-learning offering includes:

- Management and Leadership programs;
- the New Leader Induction program, helping participants to better understand the Group's challenges and strategy and to unite them within a shared management culture;
- the Fit for the Future program that helps promising managers take on leadership roles, particularly by heading up strategic projects;
- specialized training programs for certain positions offered by the Academies;
- individual programs (Coach, DISC, 360 Feedback) and group programs (Teambuilding).



MAPLE ZHU  
Talent Acquisition  
Manager Asia Pacific

*Fit for the Future is not just a training program for me. It's also an unforgettable journey with a great team. It's a journey of embracing diversity and inclusion, a daring journey to challenge the status quo and make an impact, a journey of discovery to unleash our full potential. The journey continues."*

The Academies address job skills challenges

Designed in partnership with bioMérieux job skills experts, the academies help to adapt the skills needed for each function, anticipate and support the major transformations that impact them, and also develop a community of hands-on and innovative practices. As was the case for the Supply Chain and Purchasing Academies, one challenge we face is to provide a rising number of training courses that allow employees to earn a certificate or a degree, which facilitates their training record and their employability. In 2020, the Crucial Conversations module was rolled out in all our regions as part of the HR Academy program, and over 500 employees took part in a highly ambitious remote learning sales training program.

In 2020, Mérieux Université partnered with Coursera to provide access to online certificate-granting courses taught by top universities from around the world to all high-potential Group employees and anyone changing career tracks.

This digital offering was added to the existing language and IT skills solutions that were made available in 2019.



BERTRAND MAIGNÉ  
Supply & Demand  
Management, Industry  
& Team Support SC  
Manager

*I had the opportunity to take part in the Supply Chain Academy to develop my hard and soft skills. The courses on theory and the interactions with people from different backgrounds, especially as part of the eMBA, made this program not only enriching on a personal level, but also useful for my future career."*

Our employees are a vital force in shaping the Company's success. We place great importance on fostering their professional development while respecting the balance between their professional and personal lives.

### Translating our mindset into actions

Our corporate culture is built on three pillars: a sense of pride and belonging, boldness and initiative at every level of the company and our commitment to improve the health of patients and consumers around the globe. A cross-disciplinary project for strengthening our culture and promoting well-being at work was rolled out in 2019 and further expanded in 2020. The aim is to translate the Company's mindset into actions through the development of soft skills.

### Social dialogue

The frequency of social dialogue increased significantly during the COVID-19 pandemic, with seven agreements coming out of multiple negotiations throughout 2020.

In France, bioMérieux's Central Social and Economic Committee met 19 times in 2020 to provide information or recommendations on the corporate strategy and the continuity of business activities in the context of the pandemic.

In addition, the European Works Council, created in 2008, met twice during the year.

### Disability

In application of the 2018-2021 agreement on disability, bioMérieux allocates an annual budget of €257,000 to fund a policy for the hiring, integration and training of people with disabilities. This budget also supports job retention by adapting workstations and promotes awareness-raising and training for stakeholders involved in integrating employees with disabilities. Furthermore, we work with sheltered and adapted sector companies to enable individuals with disabilities to work in a protected environment.

In 2020 we took part in European Disability Employment Week (EDEW) and our employees' participation helped support the work of *Mille et un sourires* Association, which works with families and children affected by illness and disability.

### Employee satisfaction

In France, the Human Resources Department conducted three employee surveys in 2020 to evaluate employees' state of mind following the first lockdown, their opinion of how the COVID-19 crisis was handled, and the specific needs of people caring for family members when it comes to work/life balance. The goal is to respond to the teams' expectations and further adjust our action plans.

In the United States, as part of our continuous improvement approach, an engagement survey was conducted among employees, yielding a participation rate of 68%. The results showed a 4% increase over the 2019 survey with an 80% employee engagement rate, which is 7% higher than the average for the medical device sector.

### Renewing the MyShare employee share ownership plan

We wish to allow employees to be more closely involved in the Company's performance. Today, nearly one in two employees is a bioMérieux shareholder.

Given the success of the global employee share ownership plan in 2019, a new edition will be launched in 2021.

### Recognition for employer attractiveness

#### TOP EMPLOYER

In early 2021, bioMérieux received Top Employer certification, awarded by the Top Employers Institute, for 11 of our subsidiaries: China (2019 label renewed for 2020 and 2021), South Africa, France and the United States (2020 label renewed for 2021), Belgium, Germany, Poland, Spain, Kenya, Egypt and the Ivory Coast (2021 label).

We were also awarded 2021 regional certification in Europe and Africa.



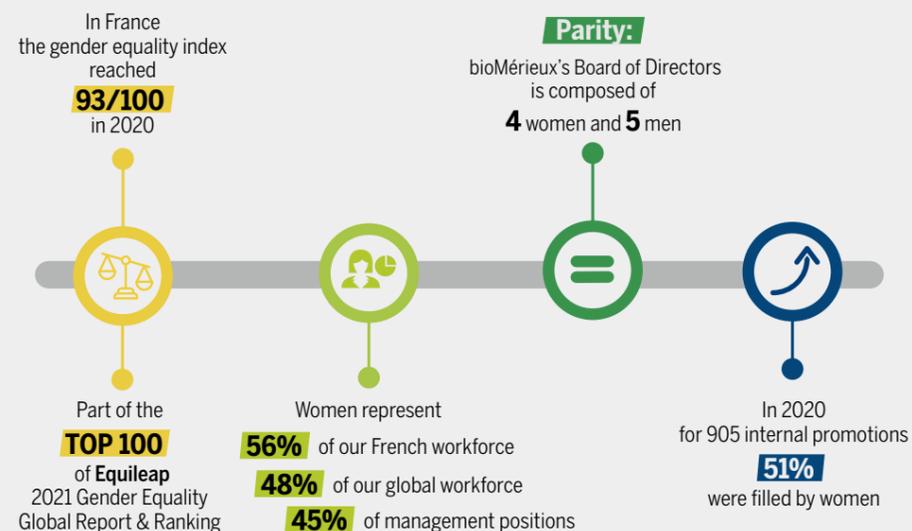
These certifications speak to the quality of our HR policies and the initiatives led by our teams. They also show that the excellent working conditions we provide to our employees are recognized and signal to future applicants that bioMérieux complies with the most stringent international standards when it comes to our working environment.

#### GREAT PLACE TO WORK®

In 2020, bioMérieux Brazil and Mexico received this certification that recognizes companies that are great places to work.

#### UNIVERSUM RANKING

For the second year in a row, in 2020 bioMérieux was featured on the Universum France ranking of the most attractive French employers for future graduates of engineering and management schools.



### Gender equality

A new Professional Equality, Diversity & Inclusion agreement went into effect on January 1st, 2021, covering a three-year period.

It emphasizes training for all internal stakeholders to prevent sexist remarks and behaviors, with a special training module for managers. According to bioMérieux's non-discrimination policy, skills are the only criteria considered when assessing an internal or external job applicant.

The agreement provides for special accommodations for employees undergoing medically assisted reproduction treatments and also establishes a parental leave option for the second parent, who can take four weeks off during the four months following the birth of a child.



**GUARANTEEING OUR EMPLOYEES' HEALTH, SAFETY AND QUALITY OF LIFE AT WORK**

For the health and safety of our employees, our policy focuses on practical preventive actions to reduce the risks associated with the activities at all our production sites, research laboratories and offices.

We also develop programs to improve their quality of life at work.

In September 2020, bioMérieux updated its HSE (Health, Safety, Environment) policy to comply with ISO 45001 requirements, the latest international standard for occupational health and safety at work. To preserve the health and safety of our employees, customers, suppliers and scientific partners, the we are committed to:

- providing every employee around the globe with a safe, healthy workplace and preventing injuries and occupational diseases by eliminating hazards and reducing risks, especially when it comes to musculo-skeletal disorders;
- incorporating health and safety into the processes that form the backbone of the product lifecycle, continuously improving our systems for managing health, safety and performance in these areas;
- consulting and engaging with employees and their representatives.



**Raising employee awareness about safety**

The campaign to raise awareness about accident prevention that has been underway for several years now and the "Safety Interactions" e-learning program rolled out in 2020 at all our European sites have proven effective: in 2020, our accident rate dropped dramatically, down 36% compared to the level in 2015. Managing the COVID crisis did not impact our performance in this area, as our industrial operations were uninterrupted. These efforts were bolstered at the end of the year with the launch of the "Safety by choice not by chance" online course.

During the COVID-19 pandemic, special measures were put in place at all our sites and for all our employees, whether they were working from home, on site or on location at customer facilities.

Special health protocols were developed to keep our employees safe while working in laboratories and hospitals.

In 2020, around 2,000 employees worldwide took part in an online training course to raise awareness about the risks of driving motor vehicles.

**ISO 45001 CERTIFICATION**

In late 2020, seven sites: Marcy l'Étoile, La Balme, Saint-Vulbas, Grenoble and Verniolle (France), Madrid (Spain), Florence (Italy) successfully converted their OHSAS 18001 certifications into ISO 45001 certifications, planning to keep only this reference certification going forward. In France, the OHSAS 18001 certification for the Craponne and Combourg sites is still valid and both sites will apply for ISO 45001 certification in 2021.

Today, 100% of European sites possess an internationally recognized Health and Safety certification.

In the United States, the pandemic caused the Durham, Saint Louis and Lombard sites to postpone ISO 45001 certification applications that had initially been planned for 2020 until 2021.

**Promoting employee health**

Protecting the health of employees takes many forms:

- all Group employees are covered by health insurance;
- sites encourage employees to engage in sports activities;
- on a regular basis, actions to build awareness about hygiene measures and public health priorities as well as free seasonal influenza vaccination campaigns are organized at most sites;
- in the United States, a pilot healthcare and education program is being developed in St Louis through a medical center for employees and their families. The St. Louis and Durham sites raise awareness among employees and their families about priority public health measures and a digital program to help people lose weight is also available to employees;
- in the United States, maternity and paternity leave have been extended to 12 and 2 weeks, respectively.

Although slowed by the pandemic, in France a program for evaluating psychosocial risks (PSR) has reached the final stage. It involves several steps: creating a PSR Steering Committee; distributing a diagnostic questionnaire to all employees and analyzing, interpreting and reporting the results; having employees take part in working groups focusing on the identified topics; and developing and implementing an action plan.

In this context, to address new PSR (teleworking malaise, feelings of isolation, a loss of meaning in work, etc.), bioMérieux has established a partnership with the Eutelmed platform to provide employees and their families with free access to psychologists around the globe.

Messaging to raise awareness about PSR and initiatives to encourage best practices have been communicated to employees working remotely, in coordination with Human Resources (blocking out time for a lunch break, online classes to promote stretching and fitness, etc.).

In late 2020, a change was introduced to PSR tracking with the creation of new committees. Each committee is made up of a site's Human Resources manager, occupational physician and social worker. The role of these committees is to review situations involving individuals or groups and to implement corrective actions immediately. The committee's work is shared with the central commission in charge of health, safety and working conditions.

**Updates on our Quality of Life at Work (QLW) agreement**

In France, the first agreement on Quality of Life at Work (QLW) was signed unanimously in 2019 by the unions present in the Company. The agreement was based on the results of a QLW questionnaire distributed to all our employees worldwide. It reflects bioMérieux's wish to continue to develop conditions to foster employee engagement, motivate teams and ensure the individual and collective well-being of employees in France and the rest of the world. It builds on numerous initiatives already in place within the Company.

In particular, it establishes new ways of organizing work, such as, for example, additional teleworking days upon request (FlexJob) on top of regular teleworking, as well as several other measures that contribute to employees' wellbeing and quality of life. In 2020, as teleworking was expanded due to the pandemic, a working group was formed to find out more about employee expectations and update this agreement.

**CONCIERGE SERVICE**

After opening at the French sites of Craponne, Marcy l'Étoile and Campus de l'Étoile and La Balme, a concierge service was inaugurated in 2021 at the site in Grenoble. bioMérieux covers the cost of this multiservice desk, and employees pay for their orders at a preferential rate. This service enables interested employees to optimize their day-to-day organization and helps them maintain a healthy work-life balance.

PERFORMANCE INDICATOR	2019	2020
FREQUENCY RATE OF LOST-TIME ACCIDENTS*	2.1	1.2
FREQUENCY RATE OF ACCIDENTS WITH AND WITHOUT LOST TIME**	4.0	2.6

\* (Number of accidents with lost time/hours worked) x 1,000,000.  
 \*\* (Number of accidents with and without lost time/hours worked) x 1,000,000.

## LONG-TERM PARTNERSHIPS WITH COMMUNITIES

As an economic player, bioMérieux is committed to sustaining our relationships with partners over the long term.

We are actively involved in local initiatives, especially those targeting young people, in partnership with associations and NGOs.

In 2020, we made exceptional donations to help the most vulnerable groups affected by the economic and social consequences of the global pandemic, and we set up a corporate endowment fund for those in need.

We are also committed to improving access to diagnostics for vulnerable populations through the work of the Mérieux Foundation and the Fondation Christophe et Rodolphe Mérieux, alongside our own corporate philanthropy program.



### PROMOTING A RESPONSIBLE AND SUSTAINABLE VALUE CHAIN

#### Responsible purchasing

At bioMérieux, we engage our suppliers in a continuous improvement approach and in our strategy based on environmental protection, social progress, respect for human rights and ethics in business. Our commitments to our suppliers and what we expect of them are outlined in the Charter for Responsible Purchasing between bioMérieux and its Suppliers.

Since 2018, we have stepped up our supplier evaluations by inserting additional criteria in the selection process and by monitoring our strategic partners' Corporate Social Responsibility (CSR) performance. We have launched a supplier CSR assessment process; in 2020, more than 200 strategic suppliers, representing 34% of purchasing expenditures, were rated by the EcoVadis agency. The minimum expected score of 45 out of 100 was met or exceeded by 157 suppliers. In 2021, we will ask for action plans from suppliers who failed to achieve the minimum score.

A tool for managing supplier performance, designed to improve oversight, was launched in 2020 and will be implemented progressively between 2021 and 2022.



#### Distributor management

Making careful selections within our distributor network is key to bioMérieux's growth. In 2020, our organization was made even stronger through the deployment of global, regional and local teams that are fully committed to implementing operational best practices at our partner companies. We regularly conduct audits to evaluate how well distributors comply with the Code of Conduct and how they perform when it comes to product transportation, installed base maintenance, and adequate user training sessions.

SOLIDARITY INITIATIVES TO PROMOTE EQUAL OPPORTUNITY AND HELP THOSE MOST IN NEED



Since 2007, bioMérieux has been one of the primary partners of the *Sport dans la Ville* association, which uses sport to help young people from disadvantaged neighborhoods find their place in society and the professional world. For the past few years, we have supported the development of the *Apprenti'Bus* program, which provides vehicles for traveling education initiatives that help youngsters learn written and oral communication skills.

In 2020, bioMérieux provided additional support to ensure that as many young people as possible in the association would receive help with homework during the pandemic. This support is divided into four areas: preparing for and understanding the transition to middle school, weekly in-person sessions for children in 6<sup>th</sup> and 7<sup>th</sup> grade, combined tutoring and sporting activities for middle-schoolers, and remote tutoring through a dedicated software program with computers provided to students in their final years of high school.



In 2014, bioMérieux established a partnership with *Institut Télémaque*, whose mission is to kickstart social mobility by supporting deserving, academically ambitious youngsters from modest backgrounds, from 7<sup>th</sup> grade through high school graduation. The goal of support programs is to enable these young people to achieve a greater degree of cultural and professional awareness, nurture their ambition, build on their successes, combat self-doubt and feel confident about their potential.

In 2020, we pledged to fund the work of volunteer employees from our company as they provide support to 40 young people chosen by *Institut Télémaque* for a three-year period.



In early 2019, Alain Mérieux, President of Institut Mérieux, officially launched *L'Entreprise des Possibles*, a highly innovative social initiative that calls on businesses in the Lyon area and their employees to help homeless and vulnerable individuals. bioMérieux is one of the 22 founding companies of this collective, which at the end of 2020 included 58 member companies and 26 partner associations. Two incentive programs were put in place to make it easier for our employees to take part: donating paid leave (with 100% matching contributions from bioMérieux) or volunteering.

In response to the first option, bioMérieux employees gave overwhelmingly, donating 462 days of paid leave in 2020 which, once monetized, resulted in a donation of €250,000 to the endowment fund of *L'Entreprise des Possibles*. The €100,000 donated in 2019 made a significant contribution to the creation of a mobile village in Lyon's 7<sup>th</sup> arrondissement in 2020.

With regard to volunteering, some 15 employees participated in volunteer work in 2020. This work included helping a young jobseeker through the AIOJ (youth housing assistance association) association and preparing meals at *Escale Solidaire*, a community-building initiative from the *Habitat et Humanisme* organization.



bioMérieux supports the work of Bioforce, a humanitarian organization founded in Lyon in 1983 at the incentive of Dr. Charles Mérieux, who came to the conclusion that no aid work is possible without logistics support. Bioforce enables individuals, organizations and institutions that respond to the needs born out of humanitarian crises to acquire, develop and maintain the skills they need to accomplish their work, ensuring that they can deliver effective, high-quality assistance to vulnerable populations. The organization works to ensure that skill development tools are available and accessible to all worldwide.

PROMOTING LOCAL CULTURAL INITIATIVES

bioMérieux supports cultural initiatives in the local communities where it operates. The Company is a donor to the Musée de Grenoble, the *Musée des Beaux-Arts* in Lyon and the *Musée des Confluences* in Lyon, funding the acquisition of works with significant value for French cultural heritage. In 2019, bioMérieux helped the *Musée des Beaux-Arts* in Lyon acquire "Katia in a Yellow Dress," a painting by Henri Matisse.

We also sponsor major regional cultural events, including *Festival de la Chaise-Dieu* in Haute-Loire, with which we have a partnership dating back over 30 years, the *Festival de Musique Baroque* in Lyon, and the *Festival Lumière*, an annual film festival put on in Lyon by the Institut Lumière.

CREATING THE BIOMÉRIEUX ENDOWMENT FUND

The Company created the bioMérieux Endowment Fund in December 2020.

The goal of the fund is to support humanitarian, social and/or educational initiatives in France and around the world in order to help the most disadvantaged populations. As its founder, bioMérieux made a €20 million initial donation.

PROVIDING URGENT RELIEF DURING THE COVID-19 PANDEMIC

In response to the health, economic and social crises caused by the COVID-19 pandemic, and in line with its commitments as a responsible company that believes in humanistic values, bioMérieux decided to reduce by half its dividend for the 2019 financial year.

The difference, amounting to about €22 million, was allocated as corporate philanthropy to support solidarity initiatives in the countries where we operate.

The goal is to assist vulnerable, at-risk individuals who are experiencing the worst effects of this unprecedented crisis.



DISTRIBUTION OF EXCEPTIONAL DONATIONS

€12 MILLION

to the Mérieux Foundation, in addition to bioMérieux's usual donations. The Foundation has shifted the focus of some of its programs to combat COVID-19 (see p. 64).



€2 MILLION

to L'Entreprise des Possibles, to provide assistance for homeless and disadvantaged people in Lyon and the surrounding area.



€8 MILLION

distributed to 60 projects from around the world selected with the help of regional bioMérieux teams.

These projects target five areas of focus:

- school dropout and child welfare;
- social isolation of elderly, disabled, sick and vulnerable people;
- solidarity and mutual aid;
- economic recovery and return-to-work programs;
- domestic violence and sexual abuse.



As part of its sponsorship activities, bioMérieux supports initiatives by the Mérieux Foundation, which has public interest status, and the Fondation Christophe et Rodolphe Mérieux, under the aegis of the Institut de France.

These two independent family foundations work together closely to combat infectious diseases and to sustainably improve the quality of life and health of vulnerable populations.

In 2020, bioMérieux allocated nearly €15 million to these family foundations to support their work, including €12 million on an exceptional basis.



### Acting in low- and middle-income countries

RESAOLAB (West African Network of Biomedical Analysis Laboratories) was initiated by the Foundation in 2009 to improve access to quality diagnostics for vulnerable individuals in seven West African countries. The third phase of the project has begun, and RESAOLAB received additional funding to support its COVID-19 response in the seven countries that are members of the network.

The SEALAB project, launched in 2020, aims to strengthen healthcare systems in Cambodia, Laos and Myanmar and to provide a response to emerging infectious diseases with pandemic or zoonotic potential.

The APRECIT project, which assesses strategies to improve global screening and care for latent tuberculosis infections in Cameroon and Madagascar, got underway in October.

In Madagascar, the EVAMAD project was launched in December. It aims to improve care for people living with HIV by gradually expanding access to viral load testing.

The Foundation was also asked to contribute to projects to fight antimicrobial resistance supported by the Fleming Fund in Asia and Africa (see p. 43).

In Madagascar, an initiative to create educational kits for children and their communities began several years ago. Four educational kits have been developed on the following topics: hygiene, malnutrition, infectious diseases and sex education. The kits are distributed to schools in Madagascar with support from the Ministry of National Education and several partner NGOs.



### Combating COVID-19

As a longtime ally for local stakeholders in the fight against infectious disease, the Fondation Mérieux mobilized as soon as the first warnings about the pandemic were sounded to provide assistance to the low- and middle-income countries with whom it works. The Fondation made a priority of responding to COVID-19 through large shipments of diagnostic tests, and by setting up a study (NOSO-COR) in hospitals in France and seven other countries to assess the risk of healthcare-associated infections. It also launched and expanded projects and provided support for local health authorities.

To develop these initiatives and work more closely with the hardest-hit countries, the Mérieux Fondation received an exceptional donation through bioMérieux dividends to help it respond to the unprecedented challenges created by the pandemic (see p. 62).

This Exceptional Funding Plan was used to implement four groups of projects in around 20 countries. They focused on building and renovating infrastructure, providing additional equipment for the Rodolphe Mérieux Laboratories and other partner laboratories active on the ground, developing training/knowledge sharing-projects and launching COVID-19 research. In addition to these central themes, plans are underway to build a new Bioforce center in Jordan.



### Expanding the Rodolphe Mérieux Laboratories

Most of the Rodolphe Mérieux Laboratories have played a key role in COVID-19 diagnostics, particularly those in Rio Branco, Brazil, and Beirut, Lebanon.

The container labs sent to Goma in the Democratic Republic of the Congo in late 2019 are in operation now that the equipment is in place and support and training has been provided to the lab technicians. In the second half of 2020, approximately 7,000 COVID-19 tests were performed in these laboratories.

The Rodolphe Mérieux Laboratory in Bamako, Mali received NM ISO 15189:2012 accreditation and was designated as a reference laboratory for COVID-19 diagnostics.



FONDATION CHRISTOPHE & RODOLPHE MÉRIEUX UNDER AEGIS OF THE INSTITUT DE FRANCE



ENHANCING ACCESS TO DIAGNOSTICS

THROUGH OUR DONATION PROGRAM

bioMérieux also expanded its corporate donation program to help healthcare facilities in low- and middle-income countries. Our teams, which have been active in these countries for many years, take part in research programs and grass-roots efforts to provide an effective response to infectious risks.



**Doing our part to improve diagnostic testing of pediatric fevers**

In Southeast Asia, bioMérieux is supporting a multicentric study among children with acute fevers. The study focuses on predicting disease severity.

By providing access to BIOFIRE® FILMARRAY® systems and BIOFIRE® Respiratory Panels (RP2), the study will allow to test for a broader range of pathogens than those currently assessed in the sites. This makes it possible to better understand if the severity biomarkers being studied and the prediction tools being developed perform differently depending on the pathogen responsible for each child's fever. This study is being supervised by Oxford University in six countries: Bangladesh, Cambodia, Indonesia, Laos, the Philippines and Vietnam.

**Partnership with the AMSP**

bioMérieux and the Africa Medical Supplies Platform (AMSP) are joining forces to facilitate access to diagnostic solutions to fight the COVID-19 pandemic in Africa. This partnership aims to address the supply shortages experienced by the member states of the African Union by guaranteeing effective, continuous and rapid access to bioMérieux solutions at highly competitive prices.

**Expanding access to healthcare tools to combat COVID-19: a global effort**

bioMérieux, alongside 15 other healthcare companies, is participating in the Bill and Melinda Gates Foundation initiative aimed at providing equitable access to COVID-19 diagnostic tests, treatments and vaccines that will help bring an end to the pandemic.

**GOVERNANCE & FINANCIAL TABLES**



# CORPORATE GOVERNANCE

## EXECUTIVE COMMITTEE

The Executive Committee is responsible for implementing the Company's strategy decided by the Board of Directors. It meets every month.

As of the date of publication of the annual report, the members are:



**ALEXANDRE MÉRIEUX**  
Chairman and CEO



**PIERRE BOULUD**  
Chief Operating Officer,  
Clinical Operations



**GUILLAUME BOUHOURS**  
Executive Vice President,  
CFO, Purchasing & Information  
Systems



**PIERRE CHARBONNIER**  
Executive Vice President,  
Global Quality,  
Manufacturing & Supply Chain



**FRANÇOIS LACOSTE**  
Executive Vice President,  
R&D



**VALÉRIE LEYLDÉ**  
Executive Vice President,  
Human Resources &  
Communications



**MARK MILLER**  
Executive Vice President,  
Chief Medical Officer



**YASHA MITROTTI**  
Executive Vice President,  
Industrial Microbiology



**ESTHER WICK**  
Executive Vice President,  
Legal, IP & Compliance

## BOARD OF DIRECTORS

Since 2017, Alain Mérieux, Chairman and CEO of Institut Mérieux, is Founding President of bioMérieux. The Board of Directors, which met 6 times in 2020, is comprised of 9 members as of December 31, 2020:

**ALEXANDRE MÉRIEUX**  
Chairman and CEO, bioMérieux

**PHILIPPE ARCHINARD**  
Executive Vice-President, Institut Mérieux  
Technological Innovation and Scientific Partnerships

**JEAN-LUC BÉLINGARD**  
Vice President, Institut Mérieux

**FRÉDÉRIC BESÈME**  
Director representing employees

**HAROLD BOËL**  
Chief Executive Officer, Sofina (Belgium)

**MARIE-HÉLÈNE HABERT-DASSAULT**  
Director of Communication and Patronage,  
Dassault Group

**MARIE-PAULE KIENY**  
INSERM Research Director,  
formerly Assistant Director General,  
World Health Organization

**AGNÈS LEMARCHAND**  
Director, various companies

**FANNY LETIER**  
Co-founder of GENE0 Capital Entrepreneur

## COMMITTEES OF THE BOARD OF DIRECTORS

### THE AUDIT COMMITTEE

Comprised of Agnès Lemarchand, Philippe Archinard and Harold Boël, who chairs this committee. It met 7 times in 2020.

### THE HUMAN RESOURCES & CSR COMMITTEE

Comprised of Marie-Hélène Habert-Dassault, Jean-Luc Bélingard and Fanny Letier, who chairs this committee. It met 3 times in 2020.

### THE STRATEGY COMMITTEE

Chaired by Jean-Luc Bélingard, it is comprised of all directors. It met once in 2020.

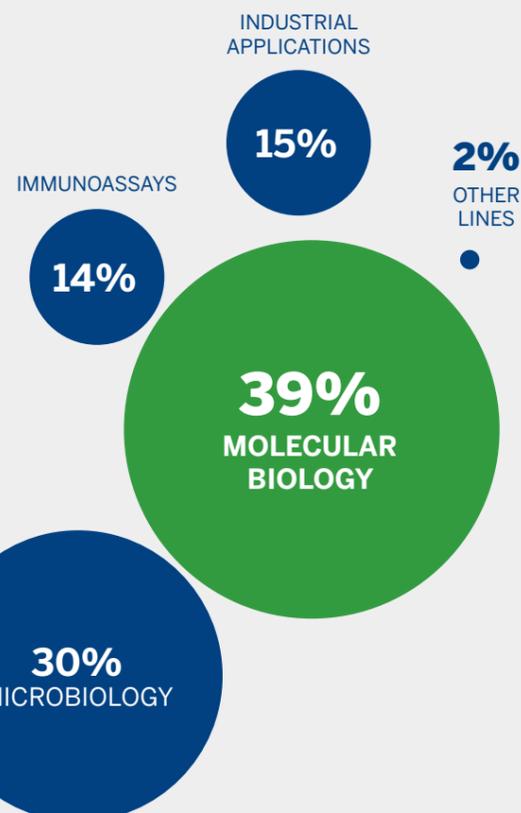
# KEY FIGURES



## REVENUE

In millions of euros

Revenue for the 2020 fiscal year amounted to €3,118 million compared to €2,675 million in 2019, up 19.7% on a like-for-like basis.



## REVENUE

By application

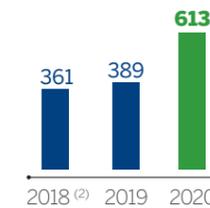
In 2020, activity sales growth was driven by molecular biology sales.

Approximately 80% of sales were generated in syndromic molecular biology, clinical microbiology and industrial applications, three areas in which bioMérieux is the world leader.

## CONTRIBUTIVE OPERATING INCOME <sup>(1)</sup>

(in millions of euros)

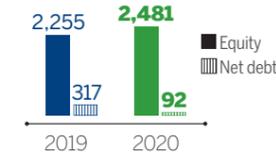
Contributive operating income before non-recurring items totaled €613 million, representing 19.6% of sales. This is up nearly 58% compared to 2019, driven by strong growth in activity.



## CHANGE IN NET DEBT

(in millions of euros)

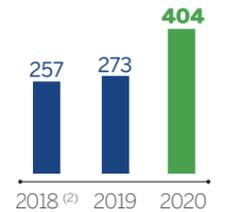
Net debt amounted to €92 million at the end of the fiscal year, including €97 million in discounted liability related to leases (IFRS16). The absence of debt leaves significant room for maneuver to serve the Company's strategic ambitions.



## NET INCOME, GROUP SHARE

(in millions of euros)

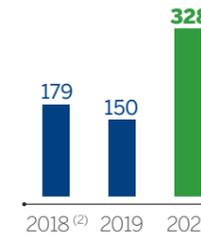
Net income amounted to €404 million, up 48% compared to 2019. It represents 13% of sales.



## FREE CASH FLOW <sup>(3)</sup>

(in millions of euros)

Free cash flow reached €328 million in 2020, compared to €150 million in 2019. This strong increase is mainly due to the favorable evolution of EBITDA, in line with the Company's activity.

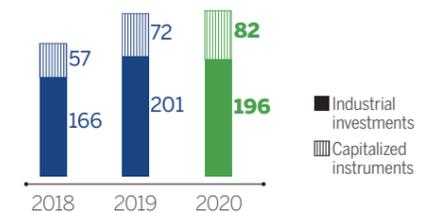


## CAPITAL EXPENDITURE

(in millions of euros)

Capital expenditure made during the year accounted for €278 million, as a result of industrial investments the strategy focused primarily on increasing the production capacity of the BIOFIRE® range in Salt Lake City.

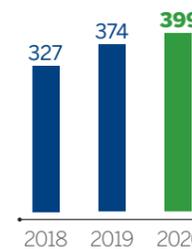
Total investments for the fiscal year accounted for approximately 9% of revenue.



## R&D EXPENSES

(in millions of euros)

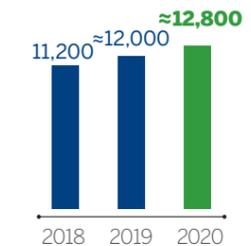
Continuing its innovation efforts, the Company invested €399 million in research and development in 2019, that being 12.8% of sales. This increase of approximately 8% at constant exchange rates and scope of consolidation reflects specific developments aimed at rapidly bringing COVID-19 diagnostic tests to the market, while continuing to support other research programs.



## HEADCOUNT AS AT DECEMBER 31

(full-time equivalent)

The increase in employee numbers in 2020 mainly reflects the strengthening of BioFire Diagnostics' industrial and sales teams to support the growth of the BIOFIRE® range.



1. The contributive operating income before non-recurring items corresponds to the operational income excluding non-recurring items related to the integration of BioFire, and accounting entries related to the allocation of its acquisition cost.  
 2. Figures from the financial statements for 2018 have been restated to include IFRS16 rules.  
 3. Cash flow prior to the acquisition of companies, treasury shares, divested businesses and dividends.

# FINANCIAL TABLES

## CONSOLIDATED INCOME STATEMENT

In millions of euros	12/31/2020	12/31/2019
<b>NET SALES</b>	<b>3,118.2</b>	<b>2,674.8</b>
Cost of sales	-1,364.5	-1,208.2
<b>GROSS PROFIT</b>	<b>1,753.7</b>	<b>1,466.6</b>
<b>OTHER OPERATING INCOME</b>	<b>46.9</b>	<b>45.9</b>
Selling and marketing expenses	-589.3	-567.6
General and administrative expenses	-200.0	-182.2
Research and development expenses	-398.8	-374.3
<b>TOTAL OPERATING EXPENSES</b>	<b>-1,188.1</b>	<b>-1,124.1</b>
<b>CONTRIBUTIVE OPERATING INCOME</b>	<b>612.5</b>	<b>388.5</b>
BioFire acquisition's fees and depreciation costs <sup>(1)</sup>	-17.5	-17.9
<b>OPERATING INCOME BEFORE NON-RECURRING ITEMS</b>	<b>595.1</b>	<b>370.7</b>
Other non-recurring income (expenses)	-42.2	0.0
<b>OPERATING INCOME</b>	<b>552.8</b>	<b>370.7</b>
Cost of net financial debt	-25.0	-20.6
Other financial items	-3.5	-2.5
Income tax	-121.5	-77.8
Investments in associates	-0.2	0.0
<b>NET INCOME OF CONSOLIDATED COMPANIES</b>	<b>402.7</b>	<b>269.7</b>
Attributable to the minority interests	-1.7	-3.1
<b>ATTRIBUTABLE TO THE PARENT COMPANY</b>	<b>404.4</b>	<b>272.8</b>
Basic net income per share	€3.42	€2.31
Diluted net income per share	€3.41	€2.30

1. Non-recurring items relating to the acquisition and integration of BioFire, and accounting entries relating to the BioFire purchase price allocation.

## CONSOLIDATED BALANCE SHEET

ASSETS (In millions of euros)	12/31/2020	12/31/2019
Intangible assets	430.7	508.4
Goodwill	629.4	652.5
Property, plant and equipment	939.0	894.7
Right of use	129.6	130.5
Financial assets	50.6	41.9
Investments in associates	0.0	0.2
Other non-current assets	14.3	16.1
Deferred tax assets	72.6	99.0
<b>NON-CURRENT ASSETS</b>	<b>2,266.3</b>	<b>2,343.5</b>
Inventories and work in progress	541.9	494.7
Accounts receivable	597.9	552.1
Other operating receivables	82.2	61.1
Tax receivable	42.3	42.3
Non-operating receivables	8.0	13.3
Cash and cash equivalents	389.2	275.0
<b>CURRENT ASSETS</b>	<b>1,661.6</b>	<b>1,438.5</b>
<b>ASSETS HELD FOR SALE</b>	<b>0.0</b>	<b>0.0</b>
<b>TOTAL ASSETS</b>	<b>3,927.8</b>	<b>3,781.9</b>

LIABILITIES AND SHAREHOLDERS' EQUITY (In millions of euros)	12/31/2020	12/31/2019
Share capital	12.0	12.0
Additional paid-in capital & reserves	2,014.8	1,919.1
Net income for the year	404.4	272.8
<b>SHAREHOLDERS' EQUITY</b>	<b>2,431.1</b>	<b>2,203.9</b>
<b>MINORITY INTERESTS</b>	<b>50.2</b>	<b>50.7</b>
<b>TOTAL EQUITY</b>	<b>2,481.3</b>	<b>2,254.6</b>
Net financial debt - long-term	352.4	153.7
Deferred tax liabilities	105.8	141.2
Provisions	64.4	62.3
<b>NON-CURRENT LIABILITIES</b>	<b>522.7</b>	<b>357.2</b>
Net financial debt - short-term	128.9	438.6
Provisions	51.4	47.0
Accounts payable	207.1	211.9
Other operating liabilities	451.7	381.1
Tax liabilities	44.3	32.3
Non-operating liabilities	40.5	59.3
<b>CURRENT LIABILITIES</b>	<b>923.8</b>	<b>1,170.1</b>
<b>LIABILITIES RELATED TO ASSETS HELD FOR SALE</b>	<b>0.0</b>	<b>0.0</b>
<b>TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY</b>	<b>3,927.8</b>	<b>3,781.9</b>

## CONSOLIDATED CASH FLOW STATEMENT

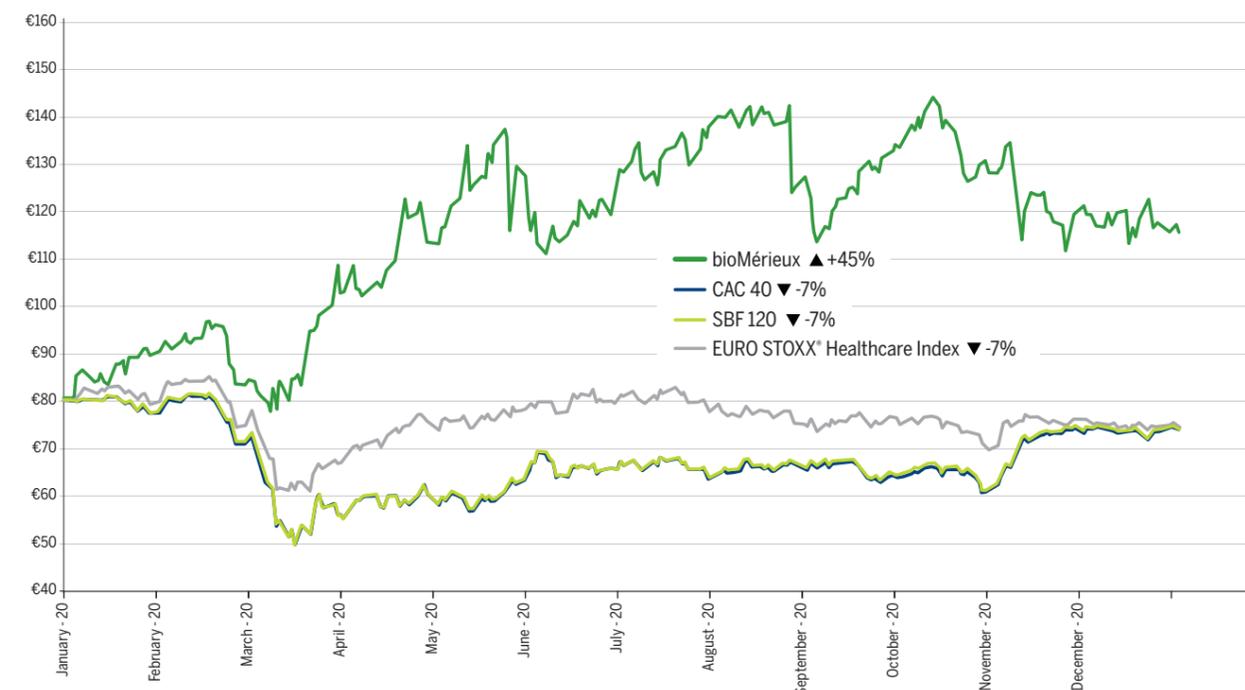
In millions of euros	12/31/2020	12/31/2019
<b>Net income of consolidated companies</b>	<b>402.7</b>	269.7
Investments in associates	0.2	0.0
Cost of net financial debt	25.0	20.6
Other financial items	3.6	2.5
Current income tax expense	121.5	77.8
Operating depreciation and provisions on assets	210.8	189.5
Non-recurring items and BioFire acquisition's fees and depreciation costs	59.7	17.8
<b>EBITDA (before non-recurring items)</b>	<b>823.5</b>	577.9
Other non current operating gains/losses (w/o exceptional depreciations, assets losses and capital gains/losses)	-42.3	-0.1
Other financial items (w/o accruals & disposal of financial assets)	-3.6	-2.0
Operating provisions for risks and contingencies	16.3	-6.8
Change in fair value of financial instruments	0.6	-1.4
Share-based payments	9.9	9.4
<b>Elimination of other gains and losses without any impact on cash or operations</b>	<b>-19.1</b>	-0.9
Change in inventories	-82.9	-71.0
Change in accounts receivable	-80.4	-57.3
Change in accounts payable	4.7	32.9
Change in other operating working capital	72.4	26.0
<b>Change in operating working capital<sup>(1)</sup></b>	<b>-86.2</b>	-69.4
Other non operating working capital	5.0	2.1
Change in non-current assets	0.5	0.4
<b>Other cashflows from operation</b>	<b>-80.7</b>	-66.9
<b>Income tax paid</b>	<b>-115.9</b>	-81.6
<b>Cost of net financial debt</b>	<b>-25.0</b>	-20.6
<b>NET CASH FLOW FROM OPERATIONS</b>	<b>582.8</b>	407.9
Purchase of property, plant and equipment	-277.5	-272.5
Proceeds on fixed asset disposals	24.7	17.1
Purchase of financial assets / Disposals of financial assets	-2.3	-2.4
<b>FREE CASH FLOW<sup>(2)</sup></b>	<b>327.7</b>	150.1
Purchase / Disposals related to minority interests	-6.3	48.4
Impact of changes in the scope of consolidation	-3.8	-72.8
<b>NET CASH FLOW FROM (USED IN) INVESTMENT ACTIVITIES</b>	<b>-265.2</b>	-282.2
Increase in capital subscribed by minority interests	1.6	0.0
Purchases and proceeds of treasury stocks	-18.4	0.0
Dividends to shareholders	-22.5	-41.3
New loan	229.5	0.0
Loan repayment	-364.0	-69.2
Variation of interests without taking or loss of control	-2.4	-23.5
<b>NET CASH FLOW FROM (USED IN) FINANCING ACTIVITIES</b>	<b>-176.2</b>	-133.9
<b>NET CHANGE IN CASH AND CASH EQUIVALENTS</b>	<b>141.4</b>	-8.2
<b>NET CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR</b>	<b>264.0</b>	278.2
Impact of currency changes on net cash and cash equivalents	-34.1	-6.1
<b>NET CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR</b>	<b>371.3</b>	264.0

1. Including allocations (reversals) of short-term provisions.

2. Corresponds to the sum of flows related to the activity and those related to investments excluding the impact of changes in the scope of consolidation. It also includes flows on treasury shares and those relative to the cost of debt.

# BIOMÉRIEUX SHARE

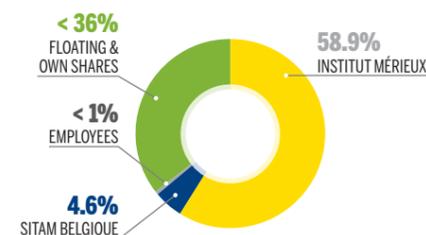
## SHARE PRICE PERFORMANCE IN 2020\*



\* Indexes rebased on bioMérieux's stock price as at 12/31/2019 (€57.50).

## BREAKDOWN OF CAPITAL

as at December 31, 2020



## CALENDAR OF EVENTS 2021

February 21	Fourth-quarter 2020 results and 2020 financial results
April 27	2021 First-quarter 2021 revenues
May 20	2021 Annual General Meeting
September 1	2021 Second-quarter 2021 revenues and first-half 2021 results at June 30, 2021
October 21	2021 Third-quarter 2021 revenues

## 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 Eurolist 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 2020, the closing price for the bioMérieux share was €115.40 (€79.35 at the end of December 2019), and bioMérieux's market capitalization was €13.7 billion. In 2020, 34,971,950 of the Company's shares were traded on Euronext compared with 23,879,941 in 2019.

## INVESTOR RELATIONS CONTACT

**Franck Admant**  
Phone: +33 (0)4 78 87 20 00 • Email: investor.relations@biomerieux.com  
The 2020 Universal Registration Document, filed with the AMF is available on our website: [www.biomerieux.com](http://www.biomerieux.com)

**Acute kidney injury (AKI)** Abrupt loss of kidney function that develops within 7 days. AKI is a broad clinical syndrome encompassing various etiologies, including specific kidney diseases, which can occur in the community, as well as in the hospital or ICU. AKI can be prevented with early detection and rapid treatment.

**Antibiotic resistance** A microorganism's natural ability to withstand the effects of antibiotics: taking an antibiotic puts selective pressure on bacteria, eliminating bacteria that are susceptible to the antibiotic and selecting resistant bacteria, which then multiply. The growing and often inappropriate use of antibiotics contributes to increasing this phenomenon, which represents a major threat to public health worldwide.

**Antibiotic susceptibility testing** Analysis to determine the susceptibility of a bacterium in the presence of antibiotics and to classify it as susceptible, resistant or intermediate.

**Biomarker / marker** Any indicator (nucleic acids, enzymes, metabolites and other types of molecules: histamines, hormones, proteins, etc.) present in or excreted by the body as a biological response to a disease.

**Blood culture** Laboratory analysis used to detect bloodstream infections, carried out by taking a sample of venous blood, which is then cultured to reveal the presence or absence of pathogenic microbes.

**Coronavirus SARS-CoV-2** This coronavirus, which is responsible for the COVID-19 pandemic, causes an acute respiratory infection (fever, cough). Respiratory difficulties and pneumonia-like lung complications have also been reported, as well as more severe forms. According to the World Health Organization (WHO), there have been 80,453,105 confirmed cases of COVID-19 worldwide, including 1,775,776 deaths as of December 30, 2020. Around 2 to 5% of COVID-19 cases are severe.

**DNA sequencing** Method used to determine the order of the nucleotide bases for a given DNA fragment.

**Endotoxin** A component of the outer membrane of certain Gram-negative bacteria that can cause high fevers. Pharmacopoeia standards require that this type of substance be absent from pharmaceutical products that come into contact with the bloodstream or the central nervous system, such as injectable drugs and medical devices. It is also recommended that the endotoxins be quantified in raw materials or in-process materials.

**Healthcare associated infection (HAI)** An infection occurring in a patient during the process of care in a hospital (or other health care facility) that was not present at the time of admission, and is directly related to the care received.

**Immunoassay** Diagnostic test based on an antigen/antibody reaction, enabling the detection of infectious agents (bacteria, viruses, parasites) and pathogen markers.

**In vitro diagnostics** Analysis of biological samples (urine, blood, etc.) performed outside the human body.

**Mass spectrometry** Analytical technique used to identify a molecule and determine its chemical structure by analyzing the mass and the charge of its ions.

**Microbiology** The study of microorganisms. In the field of *in vitro* diagnostics, culturing biological, food and pharmaceutical samples in a growth medium allows any bacteria that may be present to multiply. The bacteria are subsequently identified and their susceptibility to antibiotics tested in certain cases.

**Middle East respiratory syndrome coronavirus (MERS-CoV)** Middle East respiratory syndrome coronavirus was first identified in 2012 in Saudi Arabia. Among people affected by the disease, symptoms include fever, coughing, and shortness of breath, as well as gastrointestinal symptoms in some cases. According to WHO, approximately 35% of reported cases have led to the death of the patient.

**Molecular biology** Technique that can detect a bacterium, virus, yeast, parasite or a biomarker through the presence of DNA or RNA genetic sequences in a sample.

**Pathogen** A microbe that causes or has the potential to cause an infectious disease.

**PCR (Polymerase Chain Reaction)** Molecular biology technology for *in vitro* amplification of genetic sequences, used to copy known DNA or RNA sequences in large quantities (by an order of magnitude of a billion) from an initially small quantity. This technology is particularly useful for detecting the presence of viruses.

**Procalcitonin (PCT)** An early and specific host marker of a bacterial infection, PCT is useful to adapt antimicrobial prescriptions.

**Sepsis** A serious systemic infection characterized by the presence of bacteria, fungi, viruses and parasites in the blood and combined with an inflammatory immune-reaction (host response) that can result in the rapid deterioration of the patient's general condition leading to possible organ failure.

**Syndromic approach** Medical approach based on analyzing a syndrome (i.e., a set of symptoms and/or clinical signs) and, with a single test, identifying the disease-causing organisms responsible for this syndrome, whether they are viruses, bacteria, fungi or parasites.



05-21 • 9320922 022/GB/R • This document and/or pictures are not legally binding; modifications by bioMérieux can be made without prior notice • BIOMÉRIEUX, the logo BIOMÉRIEUX, 3P, ARGENE, ASTUTE140, BACT/ALERT, BIOBALL, BIOFIRE, CHROMID, CLARION, easyMAG, EMAG, ENDONEXT, EPISEQ, ESTREAM, ETEST, FILMARRAY, GENE-UP, MYLA, NEPRHOCHECK, NEPHROCLEAR, OBSERVA, PIONEERING DIAGNOSTICS, PREVI, R-GENE, SCANRDI, VERIPRO, VIDAS, VILINK, VIRTUO and VITEK are used, pending and/or registered trademarks belonging to bioMérieux S.A., to one of its subsidiaries or companies • B-R-A-H-M-S PCT is the property of Thermo Fisher Scientific Inc. and its subsidiaries • WASP and WASPLab are the property of COPAN Italia • SBF 120 is the property of EURONEXT PARIS SA • Any other name or trademark mentioned in this document is the property of its respective owner.

PHOTOS : Action Against Hunger, ANFASS, Athletico, E. Atkinson, Bethany, BFM AWARD©D. Nivière, bioMérieux, N. Bouchut, B&Z 2019, Caring for Friends, Children of the Mekong, Cup of Uji, M. Dagneau (Habitat et Humanisme - Escapes Solidaires), F. Dubray, Émeraude Solidaire / Café Joyeux, Mérieux Foundation, Fonds de dotation 101, C. Ganet, Institut Télémaque, O. Leal, Le Chainon Manquant, Mérieux Université, J.P. Mesguen, Mr Paparazzo, Second Harvest, SEEDS, Sport dans la Ville, Adobe Stock, Fotolia, Gettyimages, iStock, Shutterstock.

bioMérieux S.A. 673 620 399 RCS Lyon • Printed in France on recycled paper • **théra** • RCS Lyon B 398 160 242



- ALGERIA
- ARGENTINA
- AUSTRALIA
- AUSTRIA
- BELGIUM
- BRAZIL
- CANADA
- CHILE
- CHINA
- COLOMBIA
- CZECH REPUBLIC
- DENMARK
- EGYPT
- FINLAND
- FRANCE
- GERMANY
- GREECE
- HUNGARY
- INDIA
- ITALY
- IVORY COAST
- JAPAN
- KENYA
- KOREA
- MALAYSIA
- MEXICO
- NORWAY
- PHILIPPINES
- POLAND
- PORTUGAL
- RUSSIA
- SERBIA
- SINGAPORE
- SOUTH AFRICA
- SPAIN
- SWEDEN
- SWITZERLAND
- THAILAND
- THE NETHERLANDS
- TURKEY
- UNITED ARAB EMIRATES
- UNITED KINGDOM
- USA
- VIETNAM