



**FUNDAÇÃO
MARIA EMÍLIA**

*Activity
Report*
2019-2022





“Life is people’s greatest value, health is the greatest value of life, and knowledge is the greatest value of health.”

José Henrique Germann
Director of Institutional Relations

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Preface

Message from the CEO



Thereza Tourinho CEO

The Maria Emilia Foundation (FME) was established in 1998 by the will of entrepreneur Pamphilo Pedreira Freire de Carvalho, who wished to leave behind an institution that promotes education and health with social impact.

From its creation to the end of 2018, FME was led by my father, Paulo Sérgio Freire de Carvalho Gonçalves Tourinho. As president, he initiated and consolidated the Institution's activities, always in accordance with the purpose of fostering the development of actions, research, technologies, as well as processes that benefit human beings and promote inclusion in the areas of education and health.

In 2019, I assumed the presidency of FME. Since then, we have made changes that provide the institution with the necessary robustness to meet the demands of society.

The third sector has undergone significant transformations in recent years. Changes that require administrative, financial, and compliance structures that meet the new parameters of the sector, with reach and social impact.

FME has been seeking to adapt, evolve, and position itself at the forefront of investment in health and education. To achieve this, we have expanded and professionalized our technical staff and established partnerships with specialized institutions that enhance our actions.

Certainly, these two areas of knowledge are the driving forces behind the development of any society, especially the Brazilian one, which has a significant social deficit but, on the other hand, has numerous talents waiting for opportunity and support.

This is our mission: to foster and share knowledge, promoting education and health. With each research that gives back to society as a bridge to the future, our connections in favor of a country with more science multiply.

Message from the Executive Director



Thamile Accioly Executive Director

The Maria Emília Foundation is a third-sector organization that operates on two pillars: education and health.

We foster and strengthen research, science, and the development of public policies. We enhance knowledge, enabling the dissemination of information through studies such as those conducted on COVID-19 and neglected diseases - including Hansen's Disease - mentioned in this report covering the 2019-2022 period.

We are always seeking new ways to increase our social impact, communicate our actions, mobilize in support of our causes, provide pathways, and provoke reflections.

We work to have more Brazilian talents being trained in global centers of excellence and more researchers producing scientific evidence and collaborating with Brazil's development.

We establish partnerships with nationally and internationally recognized institutions because we believe that this union of forces generates an even deeper impact.

But we are also aware that there are many challenges to be faced, and therefore, it is essential for us to continue moving forward with competence and dedication in carrying out our work.



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PARTNERSHIPS



• Increase in actions and communication channels

Hiring specialized consultancy for the development and publication of a new website, as well as managing social media profiles on Facebook, Instagram, and LinkedIn.

• Development of strategic planning with annual review

Along with strategic planning, action plans were implemented, including the identification of responsibilities and practices, which allowed for monitoring results and implementing a project management model.

• Strategic partnerships

Engagement with national and international institutions. Consolidation of partnerships with the Fondation Mérieux (France), Instituto D'Or de Pesquisa e Ensino-IDOR (D'Or Institute for Research and Education), Todos pela Educação (All for Education), Escola Bahiana de Medicina e Saúde Pública-EBMSP (School of Medicine and Public Health of Bahia), Fundação de Apoio à Pesquisa e à Extensão-FAPEX (Foundation for Research and Extension Support), Fundação Bahiana de Infectologia-FBaI (Foundation for Infectious Diseases of Bahia), Escola Politécnica da Universidade Federal da Bahia-UFBA (Polytechnic School of UFBA), Fundação Oswaldo Cruz (Fiocruz), Fundação Norberto Odebrecht (FNO), and Johns Hopkins University (USA).

• Strengthening of the administrative structure

Hiring analysts for the areas of project management, communication, finance, and international relations, which allowed for expanded operations, increased agility, and a solid basis for decision-making.

• Legal advice

Hiring consulting legal advisory for the preparation of terms and instruments such as agreements, contracts, and calls for submission, which brought more security and strengthened compliance.

• Financial management

Implementation of a new system with greater transparency and traceability to monitor processes.

• Launch of the 1st Request for Proposals - Educa Saúde FME

In 2021, 20 scholarships were awarded for postgraduate specialization courses.

• Participation in the 11th GIFE Congress

The main meeting on social investment in Brazil, held biennially since 2000 by GIFE (Group of Institutes, Foundations, and Companies).

• New bylaw

In 2022, amendment and validation, along with the Public Ministry, with expansion of the scope of activities, while maintaining the focus on the same areas originally planned: health and education.

• General Data Protection Law

Implementation of the necessary adaptations to align FME with the GDPR (General Data Protection Law).

• Governance

Renewal of the Fiscal Council, Advisory Council, and Board of Directors.

• Internationalization

Increase in support for scholarship holders at international universities such as Johns Hopkins University, Harvard University, and The Rockefeller University, all located in the USA.

• Compliance

Implementation of compliance policies to better meet project requirements.

• External and independent auditing

Annual hiring of a company, free from interest or influence, to examine and certify the integrity and accuracy of the accounts.

Institutional Profile

Who We Are

The Maria Emília Foundation is a non-profit organization based in the city of Salvador, conceived by the businessman Pamphilo Pedreira Freire de Carvalho. Upon his passing in 1996, he left in will the desire to establish a foundation focused on actions in the fields of health and education.

In order to materialize this project, Pamphilo allocated a portion of his assets for the creation and sustainability of FME, ensuring that the institution fulfills its purpose.

In 1998, the Maria Emília Pedreira Freire de Carvalho Foundation was established, named in honor of Pamphilo's mother.

Pamphilo was the president of the insurance company Aliança da Bahia from 1952 to 1977. From 1978 until his passing, he assumed the presidency of the company's board of directors.

Throughout his life, he took numerous trips and always kept a watchful eye on the changes of his time, being open minded towards other cultures and societies.

Thus, with the same spirit of innovation that he had in his professional life, Pamphilo felt compelled to leave as his legacy an institution that promotes social impact and scientific advancements in health and education.





Our Purpose

To promote education and health with social impact.

Mission

To promote access to training, research, and updates in health and education, with social impact.

Vision

To be a national reference in fostering research, innovation, and human resources development in health and education.

Values

Permanence: Maintaining the legacy and ensuring economic sustainability.

Ethics and commitment: Acting with integrity, transparency, and social and institutional responsibility.

Social impact: Operating with effectiveness, delivering tangible results.



Investment Scenario in Education and Health

The world is undergoing profound demographic, economic, and climatic changes that also affect Brazil, especially in terms of health conditions.

Scientific development is certainly one of the driving forces of contemporary society and the best response to mitigate the crises and problems that such transformations can bring about.

In the last three years, when the whole world suffered from the COVID-19 pandemic, this certainty became more widespread. More than just minimizing difficulties, science and knowledge can go further: they have the

power to positively impact the population and promote significant advancements.

In comparison to other countries, Brazil still needs to advance in investments dedicated to science. According to a report from the Ministry of Science, Technology, and Innovation (MCTI), in 2019, Brazil invested 1.21% of its GDP in science and technology, while the global average is 1.79%.

During the COVID-19 pandemic, the public closely followed information on advances in scientific discoveries, vaccine development, and extensively discussed support for these activities.





Scientists became celebrities, with a daily presence in the media, explaining complex issues and providing guidance to the population.

Another important movement during this period was the increased sharing of knowledge and the acceleration of collaborative work among professionals in various research centers around the world.

This cooperation was essential for the rapid evolution of treatment methods for patients with COVID-19.

Brazil has characteristics that are important differentiators for scientific development, such as ethnic diversity of the population, a variety of natural biomes, a large number of issues to be investigated, and many researchers already working or in training process.

In this context, FME believes that it has a lot to contribute in expanding investments in the promotion of science and applied science, which are two important target areas of the institution.

In the past five years, FME has invested R\$ 20 million in projects and scholarships in the fields of health and education

How we operate

The Maria Emília Foundation operates in the fields of health and education, allocating resources to the following activities:

- **Scholarship granting**

- **Support for scientific research and publications**

- **Institutional partnerships**

- **Innovation and development of products, equipment, systems, and processes**

Requests for support for scientific research projects and scholarships must comply with the criteria defined in our calls for submission.

Governance

The Maria Emília Foundation has a governance system consisting of the Board of Trustees, Fiscal Council, Advisory Board, and Executive Board.



Board of Trustees

This Board is mainly responsible for providing guidance, supervision, and control over the activities carried out by the Foundation

President:
Silvano Gianni

Vice President:
José Maria Souza Teixeira Costa

Advisor:
Manoel Eduardo Pedreira Torres

Executive Board

In charge of the management and representation of FME, with the task of executing the fundamental guidelines and complying with the decisions of the Board of Trustees

CEO

Executive Director

CFO

Director of Institutional Relations

Chief Legal Officer

Advisory Board

Advises the Board of Trustees and the Executive Board, providing technical information on the demands received by the FME. It is composed of members of the scientific community and experts linked to the fields of health and education



Raymundo Paraná

Full professor of Gastro Hepatology at Hupes-UFBA, President of the Latin American Association for the Study of the Liver, former President of the Brazilian Society of Hepatology, and Director of Hospital Aliança.



Luiz Vicente Rizzo

Physician, Director of Research at the Hospital Israelita Albert Einstein and Full Member of the Academy of Sciences of the State of São Paulo.



Roberto Zonato Esteves

Physician, Associate Professor of Internal Medicine at the Universidade Estadual de Maringá (UEM). Researcher and consultant in health-related professions training.

Auditing Committee

The Auditing Committee is in charge of the supervision and monitoring of FME's activities, providing guidance on financial and accounting performance reports and operations, as well as issuing opinion reports. It is composed of three regular members and their respective alternates, who are elected and can be removed by the Board of Trustees

Raimundo Santos Silva
Marcelo da Silva Pinho
Paulo Cortiço Andion

Technical Staff

A multidisciplinary team, led by the Executive Board of Directors, that directly engages in activities related to the analysis, management, and dissemination of projects and partnerships



Tatianne Navarro
Project Analyst



Carini Macedo
Financial Analyst



Yéssica Lopes
Communication
Analyst



Mariana Barahona
International
Relations

Funding Sources

The endowment fund is composed of the earnings generated by two publicly traded investments: Companhia de Seguros Aliança da Bahia and Companhia de Participações Aliança da Bahia, as well as financial revenues derived from FME's cash investments.

This set of resources ensures long-term sustainability, perpetuating the institution's assets and social objectives.



Projects and Research

Hepatology



Health

Researcher:

Maria Isabel Schinoni,
gastroenterologist and associate
professor at UFBA (Universidade
Federal da Bahia)

1. Development of hepatotoxicities from the use of allopathic medications, phytomedicine, plant-based inputs, and dietary supplements in reference centers in Brazil.

Objective: develop quantitative and qualitative methods for molecular analysis of chronic hepatitis E virus in liver and kidney transplant patients, autoimmune hepatitis patients, HIV patients, and patients with hepatitis B or C with any abnormalities in the city of Salvador, Bahia, and validate molecular biology methods for the diagnosis of hepatitis E in Brazil.

2. Evaluation of serum profile and polymorphism of cytokines, biochemical, virological, and clinical course of patients with HBV-HDV coinfection with genotypes 1 and 3, treated at a reference center in Rondônia (Western Amazon), Brazil, and Hanover, Germany.

Objective: To evaluate the clinical course of HBV-HDV coinfection and the profile of serum cytokines and response to Pegylated Interferon treatment in patients infected with genotypes 1 and 3, treated at a reference center in Rondônia, Brazil, and Hanover, Germany. The viral agents of hepatitis B and Delta are a worldwide public health problem. It is believed that about 2 billion people have been in contact with the hepatitis B virus (HBV), and 18 million people are infected with HDV among the 350 million chronic HBV carriers worldwide.

Researcher:
Maria Isabel Schinoni,
gastroenterologist and associate
professor at UFBA

Hepatology



3. Development of molecular diagnostic analysis for hepatitis E viruses: a neglected disease in Brazil.

Objective: develop quantitative and qualitative methods for molecular analysis of chronic hepatitis E virus in patients with liver and kidney transplants, autoimmune hepatitis, HIV, and hepatitis B or C with abnormalities in the city of Salvador, Bahia, and validate molecular biology methods for hepatitis E diagnosis in Brazil.

4. Create a network of associated molecular biology and immunology laboratories applied to viral hepatitis for studies on molecular epidemiology, phylogenetic analysis, antiviral resistance, and immunological profile in the public health service in the Amazon/Bahia region - Multicenter Study.

Objective: create a diagnostic network for viral hepatitis in the Amazon and Bahia region, using molecular biology tools through in-house and real-time PCR methods, with the aim of optimizing the use of SUS resources, as well as standardizing techniques to analyze the cytokine profile of these patients.



Hansen's Disease



Project:

Evaluation of the role of innate immune response in Hansen's disease reactions

Researcher: Paulo Roberto Lima Machado - Medical doctor with a master's and PhD from UFBA.

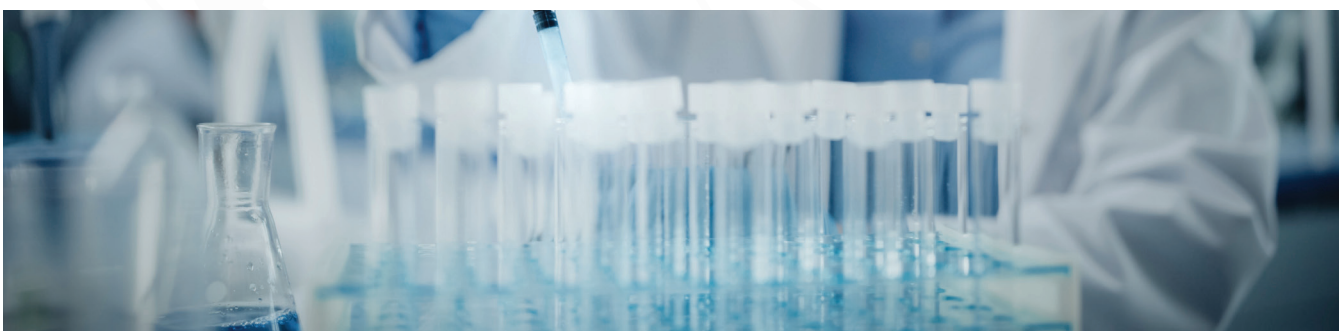
Objective: to characterize NK cells, monocytes, and macrophages regarding the expression of cell surface markers and the production of chemokines and cytokines by flow cytometry in peripheral blood. The second specific objective is to determine the expression of NK cells and the production of chemokines and cytokines in cutaneous lesions in patients with or without reactive episodes.

Project:

Evaluation of the antigen Sm29 as an immunobiological candidate associated with the treatment of reactive episodes of Hansen's disease

Researcher: Léa Cristina de C. Castelluci. Immunologist and researcher at UFBA.

Objective: to evaluate the immunomodulatory capacity of the Sm29 antigen in cells of Hansen's disease patients in search of new therapeutic strategies in the treatment of the disease.



Autism



Project:

Genetic mapping of children with autism in the population of Salvador

Research Project on Autism Spectrum Disorder (ASD).

Coordinator: Bruno Solano. Medical doctor, master's degree in health biotechnology and investigative medicine from Fiocruz, PhD in Human Pathology from UFBA

Objective: to improve knowledge about autism and the quality of life of children and young adults with autism as well as their their

families, through the provision of free genetic testing and the expansion of ongoing research.

The initiative is essential to provide more accurate direction in diagnosing children with autism through genetic testing that identifies genetic alterations and completes the cycle of the final diagnosis. This is particularly important considering that such a service is not available in the public healthcare system, and the cost of the test is often high.



Asthma



Project:

The impact of a telemedicine monitoring program on asthma control in a reference center (PROAR - UFBA)

Researcher: Carolina de Souza Machado. Nurse, Professor, PhD from the Federal University of Bahia.

Objective: to implement and evaluate the impact of remote telemedicine monitoring, compared to regular management in severe asthmatics from PROAR (Program for Asthma Control in Bahia, on asthma control, quality of life, treatment adherence, and knowledge dissemination. The program offers regular multidisciplinary follow-up (doctors, nurses, psychologists, social workers, and pharmacists) to severe asthmatic patients, with the provision of free medication.

Project:

Risk factors for absence of response in treatment and adverse events in severe asthma

Researcher: Adelmir de Souza Machado. Medical Doctor, PhD, Professor at UFBA.

Objective: A longitudinal study (ambulatory cohort) to investigate the factors associated with treatment control difficulty and the occurrence of treatment side effects in patients with severe asthma. The study aims to identify treatment response patterns in severe asthma based on its phenotypes, and investigate clinical, genetic, and environmental characteristics associated with poor treatment response and the presence of adverse events.

Leishmaniasis



Project:

Study of the efficacy of the combination of miltefosine and GM-CSF in the treatment of cutaneous leishmaniasis caused by *Leishmania (Viannia) Braziliensis*

Researcher: Edgar Marcelino de Carvalho Filho. Rheumatologist and immunologist, PhD, Professor.UFBA and Escola Bahiana de Medicina e Saúde Pública.

Objective: to evaluate the therapeutic response to the use of miltefosine combined with GM-CSF in the treatment of cutaneous leishmaniasis caused by *L. braziliensis* in an endemic region of Bahia.



Neurogenic Bladder

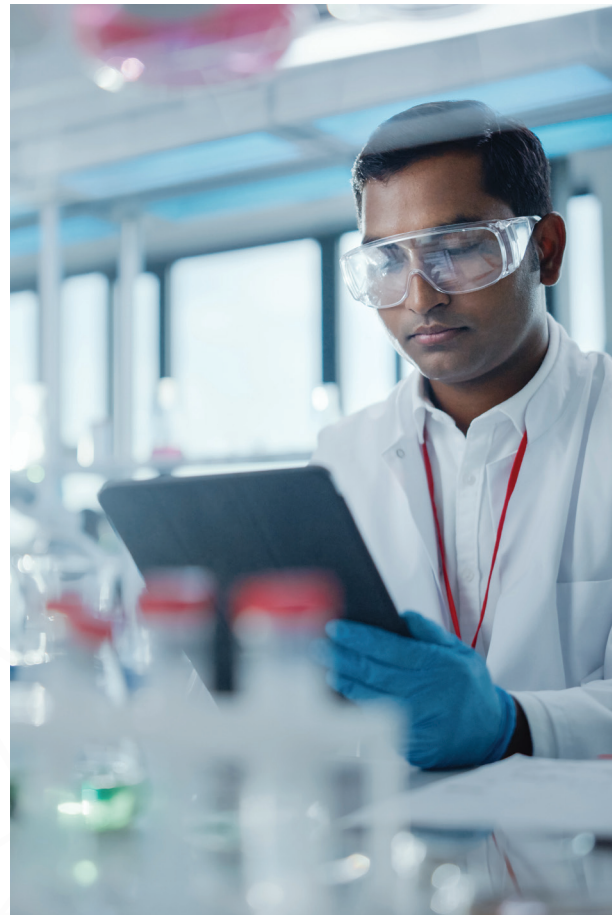


Project:

Pathogenesis and therapy of neurogenic bladder associated with HTLV-1

Researcher: Edgar Marcelino de Carvalho Filho. Rheumatologist and immunologist, PhD, Professor at UFBA and Escola Bahiana de Medicina de Medicina e Saúde Pública.

Objective: to identify, through magnetic resonance imaging and electroneuromyography, neurological impairment in patients with neurogenic bladder and erectile dysfunction associated with HTLV-1; to determine the role of proviral load and exaggerated inflammatory response in the pathogenesis of neurogenic bladder and erectile dysfunction associated with HTLV-1; and to compare the use of anticholinergic drugs with transcutaneous sacral electro physiotherapy in patients with neurogenic bladder associated with HTLV-1.





Project:

Interventional Radiology - Obras Sociais Irmã Dulce

Professional in charge: Mauricio Kauark Amoedo. Physician, specialist in neuroradiology and interventional radiology.

Objective: to expand knowledge and improve education in the medical field in general, with a focus on the specialties of radiology

(interventional) and surgery, by providing a new field of practice for minimally invasive procedures, including image-guided biopsies and drainages (ultrasound and computed tomography).



Cardiology



Molecular signature of cardiac risk: comparison of indigenous populations with varying degrees of urbanization

Researcher: Manoel Barral Neto. Medical doctor, PhD in human pathology, researcher at Fiocruz, full member of the Academy of Sciences. Professor at UFBA Medical School.

Objective: To establish a molecular signature of risk markers based on the identification of the risk profile of the indigenous population in the São Francisco River basin, in the states of Pernambuco and Bahia, aiming to determine the effects of urbanization on this population group.

Registry of Acute Coronary Syndromes in a reference center in Salvador, Bahia

Researchers:

Luís Cláudio Lemos Correa - MD, PhD in Medical Sciences, Master's in Public Health from the Johns Hopkins Bloomberg School of Public Health. Cardiologist, medical professor, researcher, and public health consultant.

Mateus dos Santos Viana - Medical doctor, cardiologist. Doctorate in Medicine and Human Health from the Escola Bahiana de Medicina e Saúde Pública.

Objective: To promote knowledge that fosters rationality in decision-making in acute coronary syndromes. The project aims to describe the variability of medical management and its determinants, identify cognitive biases in medical decision-making, and develop diagnostic and prognostic prediction models, using traditional statistics and artificial intelligence.

Mastology



Project:
Amigas do peito (“Breast Friends”) - OSID

Person in charge: Mauro Froes. Mastologist physician, specialized in oncoplastic surgery.

Objective: Practical qualification of the mastology residency program at the Obras Sociais Irmã Dulce (OSID), through the performance of breast reconstruction surgeries using implants or tissue expansion.



Covid -19



The COVID-19 pandemic has profoundly affected the activities of the Foundation and required agility and flexibility in responding to urgent demands to support the population. FME donated resources to the State Health Fund, which were exclusively aimed at the prevention, control, and risk containment, damages, and harm to public health related to the pandemic.

Resources were mobilized for social protection actions targeting vulnerable communities and social groups affected by income loss due to the crisis caused by COVID-19. In this initiative, the Foundation contributed to the distribution of essential food and hygiene items in support of health policies, services, and professionals.

In the field of scientific research, FME has been supporting various studies on SARS-CoV-2, the virus that causes COVID-19.

Profile of viral infections and associated laboratory alterations in children treated at an emergency department in Salvador, Bahia, during the COVID-19 epidemic

Researcher: Hugo Ribeiro Júnior. Gastroenterologist, full professor at UFBA Medical School.

Objective: To identify children with respiratory infections and their etiologies, whether related or not to the coronavirus and severe acute respiratory syndrome 2 (SARS-CoV-2), and describe the corresponding immunological profile.

Covid -19



Genomic surveillance for SARS-CoV-2 in the cities of Salvador and Feira de Santana, Bahia

Researchers:

Luís Cláudio Lemos Correa - MD, PhD in Medical Sciences, Master's in Public Health from Johns Hopkins Bloomberg School of Public Health. Cardiologist, medical professor,, public health consultant.

Aquiles Camelier - Medical pneumologist, Professor at Escola Bahiana de Medicina e Saúde Pública , and UFBA.

Objective: To study the circulation of SARS-CoV-2 in the cities of Salvador and Feira de Santana through laboratory diagnosis and genomic surveillance of circulating viral strains.

Clinical characteristics and mortality of respiratory infection in suspected or confirmed cases of infection by the coronavirus (2019 SARS-CoV-2) in patients admitted to Hospital Aliança, in Salvador, in 2020

Researchers:

Luís Cláudio Lemos Correa - MD, PhD in Medical Sciences, Master's in Public Health from Johns Hopkins Bloomberg School of Public Health. Cardiologist, professor of medicine, public health consultant.

Aquiles Camelier - Medical pneumologist, Professor at the Escola Bahiana de Medicina e Saúde Pública , and UFBA.

Objective: to study the demographic and clinical characteristics, as well as the prognosis and progression of COVID-19 in patients admitted to Hospital Aliança, in order to improve care, assist other healthcare services, and document the history of the pandemic.

Covid -19



Muscle mass in COVID-19 patients and impact on mortality in a hospital in Northeastern Brazil

Retrospective Cohort Study.

Researcher: Rafael Pinto Lourenço. Nutritionist, PhD candidate in Health Sciences (UFBA).

Undergraduate Research Fellow: Caren Nariel Pereira Santos Souza.

Objective: To evaluate the prevalence of low muscle mass using computed tomography (CT) in COVID-19 patients and its impact on ICU admissions and mortality in a hospital in Northeastern Brazil.

The Bee Covid Study. Propolis: An important ally against COVID

Coordinator: Marcelo Silveira. Nephrologist. Instituto D'Or de Pesquisa e Ensino (IDOR).

Objective: To evaluate the use of Green Propolis Extract (EPP-AF) in the treatment of COVID-19 in 120 hospitalized patients at a private hospital in Salvador, Bahia. Assess patient recovery, length of hospital stay, and rate of kidney injury.

Characterization and evaluation of multi-drug resistant bacterial and fungal infections in COVID-19 patients hospitalized at an infectious diseases hospital in Salvador, Bahia, through the Postgraduate Program in Biotechnology and Investigative Medicine of the Fundação Oswaldo Cruz (FIOCRUZ)

Researcher: Verônica de França Diniz Rocha.

Objective: To characterize and evaluate infections and colonization by multidrug-resistant and fungal bacteria in patients hospitalized during the COVID-19 pandemic at an infectious diseases hospital in Salvador, Bahia. Healthcare-associated infections, especially those caused by multidrug-resistant bacteria (MDR), are a problem faced in intensive care units (ICUs) where patients have a higher risk of nosocomial infections. This problem was exacerbated during the COVID-19 pandemic.

Dengue



Project:

Todos Juntos Contra o Mosquito (All Together Against the Mosquito)

Objective: To train and mobilize students from public schools in the city of Salvador to consistently, firmly, and thoroughly combat the proliferation of *Aedes Aegypti*, improving health and quality of life of the community. Public health and the issue of dengue,

chikungunya, and zika were presented from an interdisciplinary perspective, in line with the cross-cutting themes of the National Curriculum Parameters of the Brazilian Ministry of Education.



Infectious Diseases



Project:

Research in Infectious Diseases and Human Resources Training at Charles Mérieux Laboratories (France)

Objective: Project in partnership with the Charles Mérieux Foundation, conducted in laboratories in the states of Acre and Bahia with the aim of human resources training; exchange

of students, professors, and coordinators; acquisition of materials for the laboratories; participation in congresses and scientific meetings, thesis and article production.



Projects and Research

Personnel
Training



Education

Project:
Eco Escola - Casa Pia

Objective: to contribute to the generation and dissemination of knowledge and technologies in education and health, with a social impact, and to educate all those involved (teachers,

parents or guardians, students, and staff) in the conscious path of socio-environmental responsibility.



Personnel Training



Extension Course CEPEn - OSID

Professional in charge: Vanessa Cristina dos Santos Conceição. Nurse, specialist in emergency nursing, and leader of the Centro de Ensino e Pesquisa em Enfermagem-CEPEN (Center for Nursing Education and Research).

Objective: to enhance the skills of nurses and nursing technicians through various practical and theoretical activities.

UpToDate Database implementation - OSID

Professional in charge: Sandro Cal Barral - Teaching and Research Assistant - OSID

Objective: The UpToDate system is a collection of evidence-based medical and clinical information, peer-reviewed, available both online and offline on various digital platforms. UpToDate provides a wide range of knowledge to the body of residents, undergraduate students, institutional clinical staff, as well as retraining preceptors in the teaching-learning process. It contributes to the accuracy and speed of evaluative processes in healthcare and bedside decision-making, leading to improved patient treatment approaches with the necessary ethical and technical accuracy.

1st “EDUCA SAÚDE”
Call for Submissions



Educa Saúde FME

Through the EDUCA SAÚDE (HEALTH EDUCATION) FME Call for Submissions, the Foundation awarded twenty full scholarships for postgraduate courses in the form of specialization.

The areas covered by the call were: medicine, nursing, physiotherapy, physical education, nutrition, psychology, pharmacy, biotechnology, biomedical sciences, dentistry, speech therapy, collective health, and occupational therapy.

The call had extensive coverage with 38 placements in media outlets, notably on TV Bahia, TVE, CNN, and TV Alba, in the three major print newspapers of Salvador, major news portals, as well as on the radio stations A Tarde FM, Nova Brasil, Digital FM, Acorda Cidade (Feira de Santana), in addition to our communication channels (website and social media).

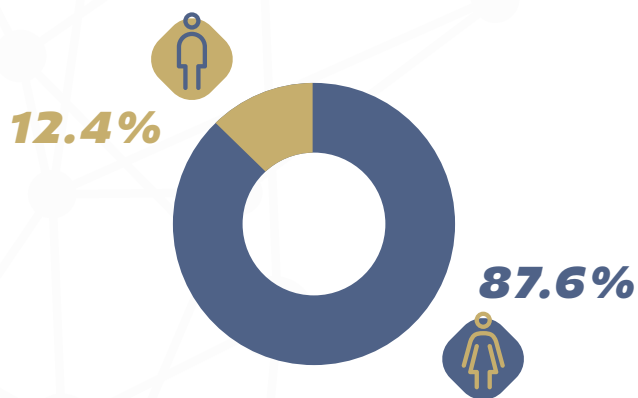
The profile of the candidates was predominantly composed of women (87.6%), and out of the total, half were young researchers aged 25 to 34.

1st "EDUCA SAÚDE" Call for Submissions

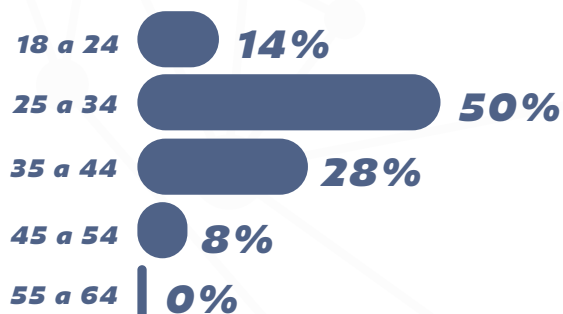


PROFILE OF APPLICANTS

Gender distribution chart



Age Group



“

The Educa Saúde FME Call for Applications became the open door I had been waiting for to advance and seize opportunities to face the job market as a dentist. With the specialization in oral rehabilitation, I started working as an assistant dentist. It is an opportunity that is truly changing my life and allowing me to grow.

”

**Mateus Leite
Santos**

*Scholarship
awardee*



The Maria Emília Foundation awarded scholarships to Brazilians at some of the best universities in the world, investing in the production of knowledge and evidence about and for Brazil.

National

Partnership with the Instituto D'Or de Pesquisa e Ensino

Human resources training for the implementation/execution of research by IDOR through its Center for Biotechnology and Cellular Therapy (CBTC)

The project supports the training of researchers, from undergraduate to postdoctoral level. The scholarship recipients are involved in IDOR's institutional portfolio projects, and the doctoral students are affiliated with IDOR's doctoral program. The IDOR's doctoral program has a strong multidisciplinary focus, reflected in several areas of expertise of the faculty and its receptivity to students from different

Scholarships



professional backgrounds. Through its lines of research and curriculum, the program provides a solid training in clinical and translational research.

Projects

- Study of neuronal migration in neurospheres derived from induced pluripotent stem cells of an autistic patient with a mutation in the RELN gene.
- Cannabinoids in the treatment of neurodevelopmental disorders: a study using cellular models of epilepsy.
- Myocardial injury during SARS-CoV-2 infection.
- Sympathetic nerve activity, cardiac function, endothelial function, aortic arterial stiffness, and physical capacity in breast cancer survivors treated with doxorubicin and trastuzumab.

Scholarships



Projects

- Methylation of retrotransposon LINE-1 and hes1 gene: implications in prematurity and neurodevelopment of newborns in Rio de Janeiro.
- Refinement, validation, and impact assessment of a natural language processing tool for automated identification and classification of incidental lung nodules.
- The role of COVID-19 in the onset and progression of Alzheimer's disease.
- Overview of anal canal cancer in Brazil.

- Laser therapy in the prevention and treatment of post-chemotherapy mucositis in a reference hospital of SUS - Sistema Único de Saúde (Brazilian Unified Health System) in Rio de Janeiro.
- Comparative study of the use of electronic and manual instruments in conducting clinical trials.
- Transdiagnostic predictors of response to serotonin reuptake inhibitors: the TRANSPORT study.
- Evaluation and analysis of standardized mortality rate as a performance indicator for an intensive care unit: comparison of results using relative risk measures and odds ratio.



Scholarships



Projects

- Development of an in vitro human model of opioid tolerance and evaluation of molecular and cellular effects of psilocybin treatment.
- Translational oncology.
- Effects of mesenchymal stem cell use in models of nervous system pathologies.
- Preclinical development of cell therapy products for the treatment of neuropsychiatric disorders.

- Functional characterization of neuronal cells generated from induced pluripotent stem cells (iPSCs) of patients with Dravet syndrome.
- Characterization of post-translational modifications in neurospheres derived from Dravet patients treated with cannabidiol.
- Construction and validation of value and personality dictionaries for the Portuguese language.

Doctorate in Philosophy

Scholarship awarded to José Clerison Santos Alves. Professor at the Instituto Federal Baiano and regular student in the Philosophy Graduate Program at UFBA, he is developing the doctoral thesis "The limits of abstract reason in Schopenhauer's philosophy."



International Scholarships

MASTER'S DEGREE IN PUBLIC HEALTH

A scholarship for a master's degree in public health at Johns Hopkins University - Bloomberg School of Public Health in Baltimore, Maryland, USA, was awarded to Dr. Luís Cláudio Correia.

The researcher holds a medical degree, completed a residency in cardiology, holds a Doctorate in Medicine and Health from UFBA, and has completed his PhD at the Fundação Bahiana para o Desenvolvimento das Ciências.

Additionally, Dr. Luís Cláudio is a professor at the Escola Bahiana de Medicina and serves as a scientific advisor to the National Council of Health Secretariats through the National Council for the Incorporation of Technologies in the SUS (Unified Health System) - Conitec.

“

FME's support represented an investment in the advancement of scientific vision for strategies of social transformation with a focus on population health. It provided an opportunity to highlight the public healthcare system in Brazil as a work of social justice and universality, to be taught in prominent academic centers worldwide.

”

Luís Cláudio Correia



International Scholarships

International Clinical Internship Scholarships

Camila Verônica Souza Freire received a scholarship for a two-month clinical observation at Beth Israel Deaconess Medical Center, one of the teaching hospitals of Harvard Medical School.

The scholarship holder is a ninth-semester medical student at Escola Bahiana de Medicina e Saúde Pública and was invited for the clinical internship by Dr. André D'Ávila, head of the electrophysiology department at the hospital. Camila has directed her academic career towards scientific research, particularly in metascience and evidence-based medicine.

The student was recognized by the American Forbes Science magazine in an article, with international recognition for her understanding of the COVID-19 scientific ecosystem. She received the Maria Luísa Soliani Award for



Best Research Project in 2020 and an award-winning abstract at the European Congress of Radiology 2021, through the Rising Stars program.

“

As a scholarship recipient of FME, during my exchange at the teaching hospital of Harvard Medical School, I had the opportunity to experience the clinical routine and contribute to research directly with the internship supervisor. This allowed me to acquire up-to-date and cutting-edge knowledge in one of the world's leading institutions in medicine and clinical research. The scholarship enabled me to establish international connections to develop projects for the benefit of Brazilian healthcare and also qualified me to mentor other young individuals who lack opportunities.

”

Camila
Verônica
Souza
Freire





International Scholarships

International Clinical Internship Scholarships

Letícia Nunes Campos, a medical student at the Universidade de Pernambuco, who holds prominent positions in national and international research groups, has been awarded a scholarship to participate as an associate researcher in the Paul Farmer Global Surgery Fellowship Program affiliated with the Program in Global Surgery and Social Change at Harvard Medical School (USA). This program, established in 2010, aims to promote investments in surgery and collaborates with institutions such as Partners In Health and Boston Children's Hospital (USA).



HARVARD UNIVERSITY

Marina Marangoni Roschel, a medical student at the Universidade de São Paulo (USP), with interest in scientific research in the field of valvular heart diseases and rheumatic fever, has been selected to participate as an associate researcher at Birmingham Women's Hospital (USA) and Harvard University (USA), under the guidance of Professor Elena Aikawa, from October 2022 to July 2023.



International Scholarships

International Clinical Internship Scholarships

THE ROCKEFELLER UNIVERSITY

Gabriella Lima dos Reis, a bachelor of Biological Sciences from UNICAMP (Universidade Estadual de Campinas) and a chemistry technician from the Escola Técnica Estadual (Etec) Salles Gomes. She has developed two research projects related to the construction, production, and validation of monoclonal antibodies for the therapy of acute lymphoblastic leukemia. Gabriella has been admitted to work as a research assistant at Rockefeller University (USA) for a period of one year, as part of the project "Study on the development and function of the intestinal immune system."



Thayane Lopes de Sousa, an undergraduate student in Industrial Chemistry at Universidade Federal do Maranhão (Brazilian northeastern state), is involved in research activities at the Laboratory of Research and Application of Essential Oils of the institution. She is dedicated to researching plant-based medicines, analyzing microbiological and physicochemical activities, extracting essential oils, and evaluating their biological activity. Thayane placed second in the 2021 Young Scientist edition of the XI Chemical Region Council Award. She was admitted as a visiting student during the winter of 2022 at Mississippi State University (USA), in Professor Nicholas Fitzkee's chemistry laboratory, where she conducts studies on protein binding to surfaces, receiving training in protein biochemistry, biophysical spectroscopy, and NMR methodology.



Supporters and Partnerships

National



The ICB is a philanthropic organization that aims to provide assistance to children and adolescents with visual disabilities. FME supports the maintenance and expansion of services in general ophthalmology, poor vision, general clinic, and neurology.



FME supported Todos Pela Educação, a non-profit civil society organization founded in 2006, which is funded by private resources and aims to promote the quality of basic education for all Brazilians. The institution brings together experts and organizations focused on providing technical inputs and guidance to public administrators. In this way, FME has the means to expand its impact in education by leveraging the expertise and infrastructure of competent institutions in the field.



The Fundação Bahiana para o Desenvolvimento das Ciências is a private, non-profit educational, cultural, scientific, and social institution. Its main objective is to provide education, research, and knowledge extension services in the field of health sciences, general sciences, and culture to serve the community.

The Foundation is responsible for the Escola Bahiana de Medicina e Saúde Pública, which was founded in 1952. Since then, it has graduated over 17,000 healthcare professionals and more than 6,200 specialists.

The two institutions have entered into a technical, scientific, and cultural cooperation agreement with the aim of developing projects and activities in the fields of research, education, technological development, production, technical-scientific information, publishing, national and international scholarships, healthcare assistance, social action, quality, and the environment-related issues.

Supporters and Partnerships

International



FME is a partner of the Mérieux Foundation in the training of human resources and professional exchange between the states of Bahia and Acre.

This French foundation was founded in 1967 and has been active in Brazil since the meningitis epidemic in the late 1970s. Its activities in the country aim to facilitate access to diagnosis, develop local capacity for research, and focus on infectious diseases affecting public health and vulnerable populations.

The Mérieux Foundation has built and made operational the Charles Mérieux Center for Molecular Biology Training in Salvador, Bahia, and an Infectious Disease Center in Rio Branco, Acre. The Rodolphe Mérieux Laboratory in Rio Branco is associated with a research network initiated in 2008 by the Mérieux Foundation, called the GABRIEL network (Global Approach to Biological Research, Infectious Diseases, and Epidemics in Low-income countries).

The network brings together about twenty public and private laboratories in both developed and developing countries and aims to transfer the necessary experience and knowledge for advanced laboratory research in emerging countries, particularly in the identification of pathogens, as well as training researchers and technicians.



JOHNS HOPKINS
UNIVERSITY

Founded in 1916, the Johns Hopkins Bloomberg School of Public Health is the largest school of public health in the world, known for its pioneering research and implementation of knowledge in the subject. It has 10 academic departments, over 1,500 faculty members, and more than 80 research centers.

The partnership with FME, established in November 2022, provides joint scholarships for Brazilian candidates admitted to pursue the Master's degree of Public Health at the Johns Hopkins Bloomberg School of Public Health.



Works and Publications

Scientific Article by Genário Oliveira Santos Júnior and other researchers

Support for the publication of the book: Generational Diversity: Mutations, Transformations, and Impacts of the 50+ on Organizations and Society

“Causality imputation between herbal products and hili: an algorithm evaluation in a systematic review”, in the Annals of Hepatology magazine.

On September 15, 2021, took place the online release of the book “Generational Diversity: Mutations, Transformations, and Impacts of the 50+ on Organizations and Society” by authors Maiza Neville and Fábio Rocha.

The book examines the peculiarities in career planning and management for individuals aged 50 and above, highlighting the assets of these experienced and mature professionals.

It provides insights on developing a mindset for longer activity and its characteristics, as well as information on how organizations are perceiving and addressing this age group.



Causality imputation between herbal products and HILI: An algorithm evaluation in a systematic review

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ABSTRACT

Algorithms can have several purposes in the clinical practice. There are different scales for causality imputation in DILI (Drug-Induced Liver Injury), but the applicability and validity of these for the HILI (Herb-Induced Liver Injury) evaluation is questionable for some scales. The purpose of the study was to determine the clinical and demographic profile of the patients with HILI and the main algorithmic scales used in its causality assessment. The methodology was a systematic review of articles in English, Spanish, or Portuguese language, from 1979 to 2019, involving humans, with descriptors related to HILI. Qualitative and quantitative statistical analysis were performed. As a result, from a total of 60 articles, 203 HILI reports were selected: 59.9% were women, similar with other studies, and the average age was 45.8 years. Jaundice was the most frequent symptom and regarding the type of lesion, the hepatocellular was the most frequent. In regard to HILI severity, 3.0% were severe and 7.6% were fatal or required liver transplantation. In 72.3% of the cases, the most used algorithm was RUCAM (Roussel Uclaf Causality Assessment Method). The conclusion of the study is that RUCAM was the most used algorithm for causality assessment in HILI. The patients were predominantly female, jaundice was the main symptom, and HILI is reversible in the majority of cases.
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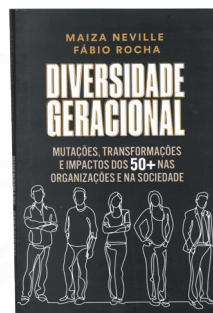
1. Introduction

DILI groups include drug-induced and xenobiotic-induced hepatotoxicity [1]. The hepatotoxicity is rich and may contain several findings [2,3]. The term HILI encompasses cases of herb-induced liver injury [4]. According to WHO, 85% of the developing countries population uses these products in their primary health care [5]. Some studies on the herbs and herbal products most consumed in the West and possibly associated with liver injury indicate that green tea is the main product associated with HILI, while in the East the natural products most associated

with HILI are called Traditional Chinese Medicine (TCM) [6]. The incidence of liver injury associated with herbal products is uncertain, due to the scarcity of epidemiological studies related to the subject.

Algorithms can have several purposes in the clinical practice. The most common approach for diagnosis and treatment, is a “checklist” to define conducts. An example of an algorithm used in imputation of causality in HILI is the RUCAM (Roussel Uclaf Causality Assessment Method) score, the algorithmic tool most used in current clinical practice for the evaluation of hepatotoxicity [7,8]. There are several algorithms used to evaluate HILI, however, there is still no

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Since 2019, FME has been recognized as a Sister Company for its support to the Obras Sociais Irmã Dulce.



It also received the “EMPRESA DE VISÃO” seal for its support to the ICB - Instituto dos Cegos (Institute for the Blind), contributing with funding for the maintenance of patient care.



Researcher Maurício Souza, supported by FME, won the award for Best Neglected Diseases Paper at the Brazilian Hepatology Congress with his study on the Delta virus.

Initiatives and Programs



Hepatitis Prevention Yellow July
(Hepatitis Awareness Month)

Promotion of Breastfeeding - Golden
August - (Breastfeeding Awareness Month)

Montessori Day Care

Third Bahian Congress on Health
Litigation

Hepatology of the
Millennium Event

11th GIFE Congress - Frontiers of
Collective Action

Digital Presence

Since 2019, FME has been intensifying digital communication in order to open new channels of dialogue with society.



[@fundacaomariaemilia](https://www.instagram.com/fundacaomariaemilia)



mariaeilia.org.br

Involvement

225.329

people engaged with the content shared by FME. This number represents individuals who liked, commented, and/or saved the posts.

Influence

5.149

people shared the content published by FME.

Reach

1.053.994

people were reached by the posts.

Views

833.276

people viewed the content of images and videos shared on FME's profiles.



Final Thoughts

Whether through the granting of academic scholarships for courses in centers of excellence, support for social action projects, or partnerships with other foundations and NGOs of proven relevance in the field of health and education, FME has been striving to establish itself as a reference institution in Bahia, as well as in the national and international scenarios.

In recent years, much has been done to professionalize and continuously improve its team of collaborators. Additionally, there has been a significant investment in communication, resulting in greater media presence of the institution, in the renewal of its marketing tools, and a clear dynamization of content on its social media platforms.

This report is concrete evidence that the efforts are bearing fruit, and the prospects are highly promising. Anchored in its mission to advance the field of science and provide quality education, FME will continue to work tirelessly for the development of education and health in Brazil.





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