

GABRIEL LABORATORY NETWORK IN THE WORLD



KEY FIGURES

- **20** member laboratories in **16** countries
- **>70 scientists** dedicated to GABRIEL research programs
- **>160 scientists** trained in new diagnostic tools
- Nearly **700 scientists** trained in molecular biology, immunology, bioinformatics, epidemiology, biosafety, quality assurance, etc.
- **46** organized **workshops**
- **50 technical trainings** by mentoring
- **10 e-learning modules** on epidemiology, clinical research, molecular biology, Zika diagnosis, biobanks
- **459 publications** since 2012
- **26** editions of the newsletter GABRIEL
- **9** international meetings of members



Collaborative research: network members

The member laboratories of the GABRIEL network jointly conduct research programs aimed at improving the control, prevention and treatment of infectious diseases that have a significant impact on public health. The network builds strong relationships with national institutions and supports public health and research initiatives at the national and international levels.

BANGLADESH

1) Bangladesh Institute of Tropical & Infectious Diseases (BITID), Rodolphe Mérieux Laboratory - Chittagong

- Public institution under the Ministry of Health
- Focus: enteric diseases, tuberculosis, pneumonia
- Infrastructure and technology: BSL2, BSL3, molecular biology, microbiology
- Built according to ISO 14644 (part 4 and 1); accredited ISO 15189
- Direct clinical access to patients



2) International Centre for Diarrheal Disease Research Bangladesh - icddr,b (Mycobacteriology Laboratory) - Dhaka Private institution with public funding

- Focus: tuberculosis diagnosis, surveillance, drug resistance, immunology, epidemiology, genotyping, transmission, control and prevention
- Infrastructure and technology: BSL2, immunology, molecular biology and typing
- Indirect clinical access to patients

3) Institute for Developing Science and Health Initiatives - ideSHi (Laboratory of Infectious Diseases and Laboratory of Genetics and Genomics) - Dhaka

- Non-government organization
- Focus: antibiotic susceptibility testing, bacteria identification, dengue, diarrhea infectious diseases, hepatitis B and C, HIV, neglected diseases, respiratory infectious diseases (influenza, pneumonia...), tuberculosis, other routine diagnosis tests
- Infrastructure and technology: molecular biology, microbiology
- Indirect clinical access to patients



BRAZIL

4) Oswaldo Cruz Institute, Oswaldo Cruz Foundation - FIOCRUZ (Laboratory of Respiratory Viruses) – Rio de Janeiro

- National Reference Laboratory
- Focus: respiratory infectious diseases (influenza, pneumonia, measles).
- Infrastructure and technology: molecular biology, bioinformatics, genomics, proteomics, immunology
- Indirect clinical access to patients

5) Laboratório Nacional de Computação Científica (LNCC), Laboratório de bioinformática (LABINFO) - Petrópolis

- Public academic / research institution
- Focus: bioinformatics
- Infrastructure and technology: genomics and bioinformatics platforms

Rodolphe Mérieux Laboratory, Fundhacre Hospital - Rio Branco

- Public institution
- Focus: tuberculosis, hepatitis B and C, HIV
- Infrastructure and technology: BSL3, BSL2, bacteriology, molecular biology, plasmid production
- Direct clinical access to patients
- GABRIEL membership under preparation



CAMBODIA

6) University of Health Sciences, Rodolphe Mérieux Laboratory - Phnom Penh

- Autonomous public academic institution
- Focus: bacteria identification, diarrhea infectious diseases, hepatitis B and C, HIV, respiratory infectious diseases (influenza, pneumonia...), zoonotic infectious diseases, pharmacokinetic of HIV drugs
- Infrastructure and technology: BSL3, molecular biology, microbiology, typing, biobanking, DST
- Built according to ISO14644 (part 4 and 1)
- Indirect clinical access to patients



CAMEROON

7) Centre Pasteur du Cameroun - Yaoundé

- National Laboratory, public institution under the Ministry of Health
- Focus: hepatitis B and C, HIV, respiratory infectious diseases (influenza, pneumonia...), tuberculosis, arbovirus, zoonotic infectious diseases, Buruli ulcer
- Infrastructure and technology: BSL2, BSL3, molecular biology, immunology, typing, DST
- Indirect clinical access to patients

CHINA

8) Institute of Pathogen Biology, Chinese Academy of Medical Sciences & Peking Union Medical College (IPB, CAMS, PUMC), Christophe Mérieux Laboratory - Beijing

- National Laboratory, Ministry of Health
- Focus: detection of respiratory infectious diseases (influenza, pneumonia)
- Technological centers/platforms: molecular screening on respiratory pathogens; viral evolutionary analyzing; deep sequencing platforms; proteins expression and purification platforms
- Indirect clinical access to patients



FRANCE

9) Emerging Pathogens Laboratory, Mérieux Foundation - Lyon

- Non-profit organization, family foundation with public interest status
- Focus: biomarkers in respiratory infections, epidemiology of acute respiratory infections, TB multidrug resistance identification, surveillance for antimicrobial resistance, emerging viral infections
- Infrastructure and technology: BSL2, BSL3, access to the BSL4 Jean Mérieux-Inserm lab, molecular biology, microbiology, immunology, typing, bioinformatics
- ISO 17025 accreditation underway



GEORGIA

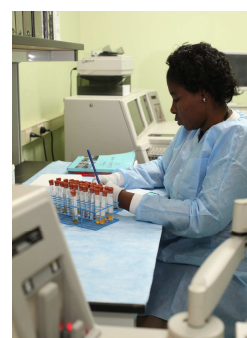
10) National Center for Tuberculosis and Lung Disease (Mycobacteriology Laboratory) -Tbilisi

- National Laboratory, non-profit organization - national tuberculosis program
- Focus: antibiotic susceptibility testing, bacteria identification and tuberculosis
- Infrastructure and technology: molecular biology PCR, hybridization, typing (Spoligo, MIRU-VNTR)
- Direct clinical access to patients

HAITI

11) GHESKIO, Rodolphe Mérieux Laboratory – Port-au-Prince

- Non-profit organization
- Focus: HIV, sexually transmitted infections, tuberculosis, respiratory infectious diseases (influenza, pneumonia), diarrhea/cholera, Zika, gender-based research
- Infrastructure and technology: BSL2, BSL3, molecular biology, microbiology, immunology, typing
- Built according to ISO 14644 (part 4 and 1), ISO 15189 accreditation
- Direct clinical access to patients



INDIA

12) King George's Medical University (Translational Medicine Unit) - Lucknow

- Autonomous state government university
- Focus: pneumonia; public health issues in child survival
- Infrastructure and technology: hospital laboratory BSL2, molecular biology, immunology
- Direct clinical access to patients





LAOS

13) Center of Infectiology Lao Christophe Mérieux – Vientiane

- Public institution under the Ministry of Health
- Focus: tuberculosis, hepatitis B and C, HIV, respiratory infectious diseases (influenza, pneumonia)
- Infrastructure and technology: BSL2+, BSL3 (underway), molecular biology, immunology, typing
- Aiming at ISO 15189 accreditation
- Indirect clinical access to patients

LEBANON

14) Université Libanaise - Laboratoire Microbiologie, Santé et Environnement – Tripoli

- Specialized laboratory for conventional and molecular techniques in the diagnosis of TB and drug susceptibility in North Lebanon, public university
- Focus: tuberculosis, pneumonia, antimicrobial resistance, microbiota, immunity and infections
- Technology: molecular biology, immunology, typing, bioinformatics
- Indirect clinical access to patients

15) Université Saint-Joseph, Rodolphe Mérieux Laboratory - Beirut

- University laboratory, approved by the Ministry of Health; reference laboratory for tuberculosis
- Focus: tuberculosis
- Infrastructure and technology: BSL2, BSL2+, BSL3, ISO8 cleanroom, molecular biology, typing
- Aiming at ISO 15189 accreditation
- Indirect clinical access to patients



MADAGASCAR

16) Charles Mérieux Center for Infectious Diseases, Rodolphe Mérieux Laboratory - Antananarivo

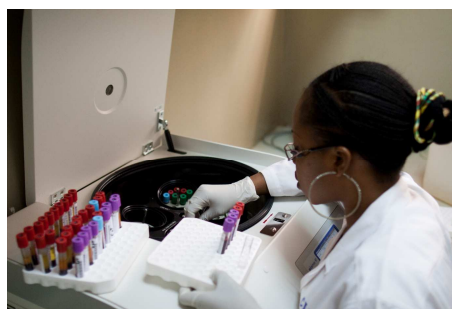
- University of Antananarivo, national reference laboratory for leprosy
- Focus: antimicrobial resistance, diarrhea diseases, neglected diseases (leprosy, chromoblastomycosis, sporotrichosis), respiratory infectious diseases (influenza, pneumonia), HIV, HPV
- Infrastructure and technology: BSL2+, molecular biology, immunology, DST
- Built according to ISO 14644 (part 4 and 1)
- Indirect clinical access to patients



MALI

17) Charles Mérieux Center for Infectious Diseases, Rodolphe Mérieux Laboratory - Bamako

- Public institution under the Ministry of Health
- Focus: respiratory infectious diseases (pneumonia), fevers, tuberculosis, antimicrobial resistance, hepatitis
- Infrastructure and technology: BSL2, BSL3 (container lab), molecular biology, immunology, microbiology
- Built according to ISO 14644 (part 4 and 1)
- Indirect clinical access to patients



MONGOLIA

18) Mongolian Academy of Medical Sciences – Ulaanbaatar

- Public institution under the authority of the Minister of Education, Culture, Science and Sports
- Focus: respiratory infectious diseases (pneumonia), fevers, tuberculosis
- Infrastructure and technology: BSL2, molecular biology, immunology



PARAGUAY

19) Instituto de Investigaciones en Ciencias de la Salud, National University of Asunción, Departamento de Biología Molecular y Biotecnología - Asuncion

- Public institution
- Focus: respiratory infectious diseases (influenza, pneumonia), tuberculosis, atypical mycobacteria, meningoencephalitis, leishmaniosis, Chagas disease, gastroenteritis viral infections
- Infrastructure and technology: BSL2, molecular biology, microbiology, immunology, typing, bioinformatics
- Indirect clinical access to patients

UKRAINE

20) Zaporozhye State Medical University (Laboratory of Molecular Genetic Studies) - Zaporozhye

- Academic institution
- Focus: tuberculosis, enterovirus infections
- Infrastructure and technology: BSL2, BSL3, molecular biology, immunology
- Indirect clinical access to patients

