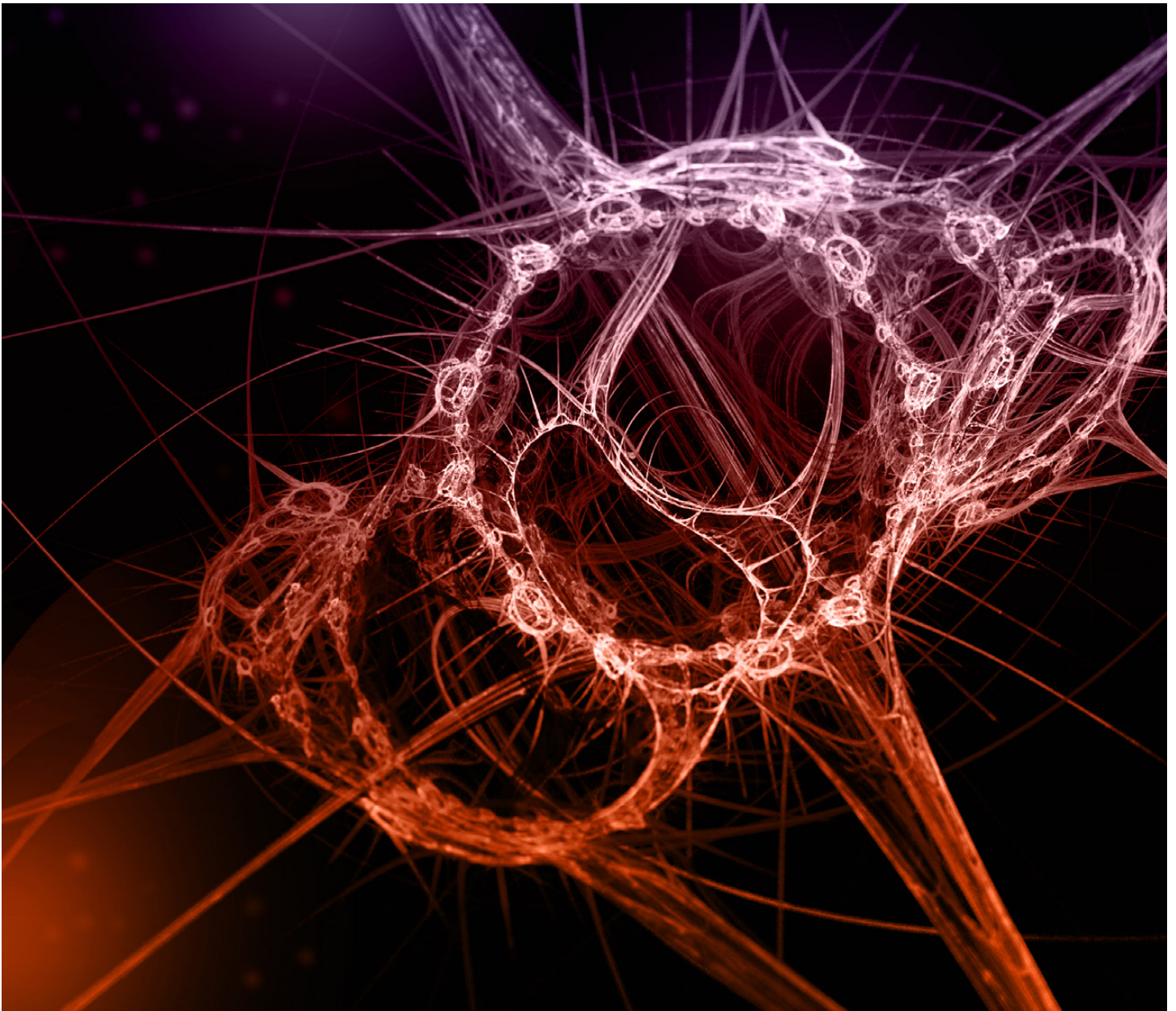




**MAYO CLINIC**  
Mayo Medical Laboratories

# **CLINICAL MICROBIOLOGY**

**COMPREHENSIVE TESTING AND CONSULTATIVE SERVICES FOR INFECTIOUS DISEASES**



## WHY MAYO CLINIC?

Mayo Clinic's internationally-renowned clinical microbiology laboratories span all areas of conventional and molecular medical microbiology, offering a broad selection of tests designed for rapid identification and in depth characterization of the causative agents of infectious diseases.

Our laboratories perform over 3 million tests annually and have developed and implemented culture techniques; immunoassays; antimicrobial susceptibility testing; and molecular methods for rapid detection, identification, and characterization; and provision treatment guidance for microbial pathogens.

## CONSULTANT-LED SUBSPECIALTY LABORATORIES

BACTERIOLOGY

HEPATITIS/HIV MOLECULAR

HEPATITIS/HIV SEROLOGY

INFECTIOUS DISEASE SEROLOGY

MYCOBACTERIOLOGY

MYCOLOGY

PARASITOLOGY

VIROLOGY

## PERFORMING THE RIGHT TESTS, NOT THE MOST TESTS

**JUST LIKE YOU, WE ARE HEALTH CARE PROVIDERS. WE TREAT PATIENTS EVERYDAY, AND OUR SERVICES ENABLE HEALTH CARE INSTITUTIONS TO:**

- ▶ Apply patient care-driven testing approaches
- ▶ Establish clinically proven test utilization strategies
- ▶ Collaborate with Mayo Clinic physicians, scientists, and laboratory professionals
- ▶ Advance the integration of community health care delivery

## THE MAYO MEDICAL LABORATORIES DIFFERENCE

Every laboratory offers testing; but, at Mayo Medical Laboratories, we offer a service that allow patients access to Mayo Clinic experts from across the world in addition to our comprehensive testing menu.

Our clinicians and laboratorians focus on maintaining high-quality, cost-effective, and efficient care by using algorithmic, evidence-based approaches that lead to correct diagnoses and treatment, while minimizing unnecessary testing. More importantly, our laboratories are managed by physicians and scientists with expert knowledge regarding the clinical implications of each test result and how it can impact patient care.

# TESTING CATEGORIES

Mayo Medical Laboratories offers a full menu of tests for the detection and identification of infectious diseases.

## ANTIMICROBIAL SUSCEPTIBILITY

- ▶ Phenotypic and genotypic antimicrobial susceptibility testing of bacteria, mycobacteria, and fungal isolates

## CNS INFECTIONS

- ▶ Extensive nucleic acid amplification testing, culture, and serologic testing

## CYSTIC FIBROSIS

- ▶ Specialized bacterial respiratory culture as well as mycobacterial and fungal respiratory culture including organism identification

## ENDOCARDITIS

- ▶ Nucleic acid amplification tests, culture, and serologic tests for common and uncommon organisms

## FEVER OF UNKNOWN ORIGIN

- ▶ Extensive nucleic acid amplification testing, culture, and serologic testing

## GASTROINTESTINAL INFECTIONS

- ▶ Nucleic acid amplification panel for common stool pathogens, as well as individual nucleic acid amplification tests for selected pathogens
- ▶ *T. whipplei* PCR

## GENITOURINARY INFECTIONS AND SEXUALLY TRANSMITTED INFECTIONS

- ▶ Nucleic acid amplification testing on multiple specimen sources and serologic testing

## HEPATITIS

- ▶ Serologic and molecular testing for viral hepatitis agents (A, B, C, D, E)
- ▶ Antiviral drug resistance testing for HCV

## HIV

- ▶ Serologic and molecular testing, including antiviral drug resistance, for HIV-1 and HIV-2

## POST-IMMUNIZATION

- ▶ Full panel of tests for screening following immunization

## INFECTIONS OF PREGNANCY AND THE NEONATE

- ▶ Extensive PCR and serology panels

## INFECTIONS OF THE IMMUNOCOMPROMISED HOST

- ▶ Extensive nucleic acid amplification testing, culture, and serologic testing

## ORGANISM IDENTIFICATION

- ▶ Extensive nucleic acid amplification and serology testing

## PREVENTION AND SURVEILLANCE FOR INFECTIOUS DISEASE

- ▶ Detection of nosocomial-acquired infections, antimicrobial susceptibility testing, bacterial strain typing by whole genome sequencing for outbreak detection and monitoring

## TRAVELER ASSOCIATED INFECTIONS

- ▶ Malaria nucleic acid amplification testing (including *Plasmodium knowlesi*), full parasite exam from blood and stool

## UPPER AND LOWER RESPIRATORY INFECTIONS

- ▶ Full culture and nucleic acid amplification testing

## VECTOR-BORNE DISEASES

- ▶ Nucleic acid amplification testing and serologic testing, including panels for mosquito and tick-borne diseases

## LABORATORY DIRECTORS



**ROBIN PATEL, M.D.**

**Division Chair**

Biofilm-related infections  
Molecular bacteriology  
Sequencing-based bacteriology



**NANCY L. WENGENACK, PH.D.**

Mycobacteriology

Mycology

Antimycobacterial and antifungal  
susceptibility testing



**MATTHEW J. BINNICKER, PH.D.**

Molecular virology

Viral infections in transplant recipients

Viral respiratory infections



**JOSEPH D. YAO, M.D.**

Hepatitis viruses

Human immunodeficiency  
virus (HIV) infection

Hepatitis and HIV antiviral  
susceptibility testing



**BOBBI S. PRITT, M.D.**

Parasitology

Vector-borne diseases

Infectious Diseases anatomic pathology



**JANE J. HATA, PH.D.**

**Laboratory Director, Florida**

Clinical Microbiology and Serology



**AUDREY SCHUETZ, M.D.**

Anaerobic bacteriology

Antibacterial susceptibility testing

Infectious diseases anatomic pathology



**THOMAS E. GRYS, PH.D.**

**Laboratory Director, Arizona**

Clinical Microbiology



**ELITZA S. THEEL, PH.D.**

Detection of antibodies against  
infectious agents

Detection of infectious diseases antigens

Vector-borne diseases

**FOR MORE INFORMATION ABOUT  
MICROBIOLOGY AND INFECTIOUS  
DISEASE TESTING, VISIT:**

[MayoMedicalLaboratories.com/microbiology](https://www.MayoMedicalLaboratories.com/microbiology)