Medical laboratory scientists are educated in the theoretical and practical aspects of laboratory medicine. As vital members of the health care team, laboratory professionals provide information necessary for the diagnosis and treatment of disease. Medical laboratory science (MLS) is a challenging profession requiring precise and accurate evaluation techniques and keen problem-solving and judgment skills that apply the basic sciences to the clinical diagnosis of health and disease.

The medical laboratory profession recognizes specialized knowledge with categorical professional credentials. Consequently, the George Washington University offers bachelor's degree students who have completed the necessary pre-requisites to obtain a certificate in the following disciplines: Blood Banking, Chemistry, Hematology, or Microbiology. All coursework is completed online while practica are completed at an approved clinical site.

These certificates are analogous to the generalist certification at the baccalaureate level [e.g. MLS(ASCP)], but focus on one discipline in the medical laboratory. Students successfully completing the online certificate program are eligible to sit for national certification exams. Individuals with categorical certificates would compete for jobs with baccalaureate individuals certified as generalists, but would be expected to work only in the discipline in which they are certified.

The GW MLS Program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).

NAACLS • 5600 N. River Rd., Suite 720
Rosemont, IL 60018-5119
t 773-714-8880 • www.naacs.org

Curricula

## POST-BACCALAUREATE CERTIFICATE IN BLOOD BANKING

(17 CREDIT HOURS TOTAL)

(3 credits each, unless noted)
- MLS 4118 Laboratory Operations (1 credit)
- MLS 4140 Clinical Laboratory Management
- MLS 4141 Immunology & Serology
- MLS 4150 Immunohematology
- MLS 4160 Blood Bank Practicum
- MLS 4163 Clinical Immunology and Serology Practicum (1 credit)

## POST-BACCALAUREATE CERTIFICATE IN CHEMISTRY

(19 CREDIT HOURS TOTAL)

(3 credits each, unless noted)
- MLS 4118 Laboratory Operations (1 credit)
- MLS 4141 Immunology & Serology
- MLS 4145 Clinical Biochemistry I
- MLS 4155 Clinical Biochemistry II (2 credits)
- MLS 4151 Molecular Diagnostics
- MLS 4161 Clinical Biochemistry Practicum (4 credits)
- MLS 4140 Clinical Laboratory Management

## POST-BACCALAUREATE CERTIFICATE IN HEMATOLOGY

(17 CREDIT HOURS TOTAL)

(3 credits each, unless noted)
- MLS 4118 Laboratory Operations (1 credit)
- MLS 4128 Hematology I (2 credits)
- MLS 4140 Clinical Laboratory Management
- MLS 4141 Immunology & Serology
- MLS 4151 Molecular Diagnostics
- MLS 4162 Hematology and Hemostasis Practicum

## POST-BACCALAUREATE CERTIFICATE IN MICROBIOLOGY

(19 CREDIT HOURS TOTAL)

(3 credits each, unless noted)
- MLS 4118 Laboratory Operations (1 credit)
- MLS 4114 Clinical Microbiology I (2 credits)
- MLS 4115 Clinical Parasitology & Mycology (1 credit)
- MLS 4124 Clinical Microbiology II (2 credits)
- MLS 4140 Clinical Laboratory Management
- MLS 4141 Immunology & Serology
- MLS 4151 Molecular Diagnostics
- MLS 4164 Clinical Microbiology Practicum (4 credits)

Clinical rotations are completed at an approved clinical site and vary in length, lasting between 1 to 4 weeks each.

For more information, including Department of Education gainful employment disclosures, please visit:
- **Blood Banking**: smhs.gwu.edu/blood-banking-cert
- **Chemistry**: smhs.gwu.edu/chemistry-cert
- **Hematology**: smhs.gwu.edu/hematology-cert
- **Microbiology**: smhs.gwu.edu/microbio-cert
THROUGHOUT THE PROGRAM STUDENTS WILL

- Acquire knowledge and skills to perform diagnostic laboratory testing on patient specimens.
- Develop, establish and perform procedures for collecting, processing, and analyzing biological specimens.
- Perform analytical tests within their categorical discipline using various manual and automated technologies to aid in the diagnosis of various diseases.
- Exercise principles of laboratory safety and management.
- Confirm abnormal results, verify, and execute quality control procedures, and develop solutions to problems concerning the generation of laboratory data.
- Maintain and promote standards of excellence in performing laboratory tests within their categorical discipline.
- Demonstrate proficiency in theoretical and practical laboratory science to successfully perform within their categorical discipline.

Apply for Admission

http://smhs.gwu.edu/crl/programs/mls/admissions/certificates

ADMISSIONS REQUIREMENTS

All applicants are required to complete an online application as well as submit the following supporting documents:

- Official transcripts from all previous academic institutions
- One letter of recommendation
- Current resume
- A statement of purpose
- Essential Functions & Clinical Site Verification Form

Admitted students may begin their course of study during the Spring, Summer, or Fall semester.

Official transcripts must demonstrate the following coursework was completed prior to admission (science coursework must include both lecture and ‘hands-on’ laboratory):

Blood Banking
Combination of 30 credit hours of Biology and Chemistry coursework.

Chemistry
Combination of 30 credit hours of Biology and Chemistry coursework; 16 credit hours must be completed in Chemistry.

Hematology
Combination of 30 credit hours of Biology and Chemistry coursework.

Microbiology
Combination of 30 credit hours of Biology and Chemistry coursework; 4 credit hours must be completed in General Microbiology.

COSTS AND FUNDING

Current information concerning tuition, fees, and other estimated expenses can be found at colonialcentral.gwu.edu.

Students who are on active-duty are eligible for a special military discount tuition rate. Please contact the program office for further information.

REQUIRED TESTS

The program does not require the submission of an entrance exam. Applicants whose native language is not English or who are not citizens of countries where English is the official language are required to submit scores from either TOEFL or IELTS. Please visit the Admissions website for more detailed information.

Connect

Marcia Firmani, PhD, MSPH, MT(ASCP)
Program Director
2100 Pennsylvania Avenue, NW, Suite 350
Washington, DC 20037
t 202-994-8338
f 202-994-1299
firmedim@gwu.edu

Nurcan Basar, MS, MLS(ASCP)
Clinical Coordinator
2100 Pennsylvania Avenue, NW, Suite 347
Washington, DC 20037
t 202-994-8298
f 202-994-1299
nurcan@gwu.edu

Stephanie Serven, MEd
Assistant Director of Admissions & Enrollment Services
2100 Pennsylvania Avenue, NW, Suite 355C
Washington, DC 20037
t 202-994-7732
f 202-994-1299
sserven@gwu.edu