## MASTER OF SCIENCE IN HEALTH SCIENCES IN THE FIELD OF MOLECULAR DIAGNOSTIC SCIENCE

Molecular diagnostic testing uses highly sensitive and specific laboratory techniques to detect and identify biomarkers at the nucleic acid (DNA and RNA) level. Common molecular-based applications include medical diagnosis, establishing prognosis, monitoring the course of disease, and selecting optimal therapies. The master of science in health sciences in molecular diagnostic sciences prepares both MLS certified and noncertified individuals for careers in clinical or public health laboratories, research institutions, law enforcement agencies, as well as biotechnology or pharmaceutical companies.

The proposed curriculum has been designed so that students can complete the entire program in two academic years and offers the flexibility of allowing students to enroll either on a full-time or parttime basis. Furthermore, the program of study provides practical experience to individuals with no previous clinical molecular diagnostic experience in the form of a molecular diagnostics practicum course.

Visit the program website (https://

healthsciencesprograms.gwu.edu/programs/mshs-in-moleculardiagnostic-science-online/) for additional information.

## ADMISSIONS

Admissions Fall - July

Deadlines:			
	Spring - November		
	Summer - March		
	The application and all supporting documentation (fees, statement of purpose, letters of recommendation, transcripts) must be received by the deadline in order for the application to be reviewed.		
Standardized Not required			
Test Scores:			
RecommendaTwo (2) recommendations required:			
Prior Academic Records:	Transcripts required from all colleges and universities attended, whether or not credit was earned, the program was completed, or the credit appears as transfer credit on another transcript. Transcripts must be forwarded in their original sealed envelopes.		
	If academic records are in a language other than English, a certified English language translation must be provided in addition to the original transcripts; translations alone will not be accepted.		

Official transcripts from institutions outside the U.S. must be accompanied by an official transcript evaluation from an accredited independent evaluating agency. Please be sure you request a detailed evaluation that includes all course titles, credit hours, grades, U.S. degree equivalency, gradepoint averages (GPA), and date of degree conferral. Please see the list of acceptable foreign credential evaluation services (https://www.naces.org/ members (https://www.naces.org/members/)).

Statement of Please include a 250-500 word essay describing Purpose: your reasons for undertaking study at the George Washington University, your academic objectives, career development plan, and related gualifications, including collegiate, professional, and community activities, relevant to your program of interest. Include any substantial accomplishments not already mentioned on the application form. Degree A bachelor's degree from a regionally accredited and GPA college or university. **Requirements:** 3.0 GPA or above on a 4.0 scale Additional Completed courses should include: 3 credits english; Requirements3 credits of college math (algebra, statistics, or higher). Additionally, students must have completed a combination of 30 semester hours or 45 quarter hours of biological, chemical and/or medical science courses with a grade of C or higher that includes the following courses: general biology I and II with

 hands-on lab; general or inorganic chemistry with hands-on lab. Please be prepared to provide unofficial transcripts to determine program admissibility.
 International This program is not visa eligible. Permanent residents Applicants: or those with a valid visa (e.g., work) may apply to perform their rotation in the US. International students may apply without a visa if they have an approved clinical site in their geographic region.
 The Health Sciences programs require the following minimum English language test scores for admission:

 Academic IETLS: an overall band score of 7.0 with no individual band score below 6.0; or
 TOEFL: 600 on paper-based or 100 on Internet 

based; or

- Academic PTE: 68

# Supporting documents not submitted online should be mailed to:

George Washington University

ATTN: Transcript Processing Center 1415 W 22<sup>nd</sup> St. Suite 220 Oak Brook, IL 60523 Alternatively, official electronic transcripts can be sent to transcripts@hsprograms.gwu.edu.

#### **Contact for questions:**

hsphora@gwu.edu 202-994-0384 (phone) 202-994-0870 (fax) Hours: 9 am to 5 pm, Monday through Friday

### REQUIREMENTS

The following requirements must be fulfilled: 36 credits, including 33 credits in required courses and one 3-credit elective course.

Code	Title	Credits
Required		
HSCI 6263	Biostatistics Translational Research	
MLS 6216	Microbial Pathogenesis	
MLS 6217	Medical Biotechnology	
MLS 6218	Genetics	
MLS 6219	Molecular Biology	
MLS 6158	Advanced Laboratory Management and Operations	
MLS 6166	Molecular Diagnostics Practicum *	
MLS 6242	Molecular Pathology	
MLS 6244	Research Ethics and Integrity	
MLS 6245	Current Topics in Medical Laboratory Science	
MLS 6246	Capstone Project	
Elective		

One 3-credit MLS or HSCI course selected in consultation with the academic advisor.

\* May be substituted with an elective course for students with current clinical molecular laboratory experience.