

DIAGNOSTIC MOLECULAR SCIENCE

Department of Clinical Laboratory Sciences University of Mississippi Medical Center

As one of the fastest growing industries of the 21st century, biotechnology is developing new diagnostic tests for clinical laboratories, research laboratories, forensic laboratories and the pharmaceutical industry. The skills of the molecular scientist are in great demand in the biotechnology and health care industry. Molecular biology has developed more than any other science in the last ten years. As a certified molecular biologist you may work in clinical, research, forensic, and biotechnology laboratories. There is an exponential growth in opportunities in this field of study.



ADMISSION REQUIREMENTS

To be eligible for admission, candidates must:

1. have a baccalaureate degree and CLS/MT certification
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1. have a baccalaureate degree in a biological, natural, or physical science from an accredited institution of higher learning;
 2. have a minimum cumulative grade point average (GPA) of 3.0 on a 4.0 scale, and
 3. complete the following minimum prerequisite requirements with a grade of "C" or better:

REQUIRED COURSES	Number of Courses
Biological Science with Laboratory	2
Anatomy and Physiology	2
Cell Biology	1
Microbiology with Laboratory	1
General Chemistry with Laboratory	2
Organic Chemistry with Laboratory	2
College Algebra	1
English Composition	2
Humanities	2
Fine Arts	1
Social/Behavioral Science	1

POST-BACCALAUREATE CERTIFICATION

The Department of Clinical Laboratory Sciences now offers a post-baccalaureate Certificate in Molecular Diagnostics. Upon successful completion of the certificate program, the graduate is qualified to take the national certification examination as a Clinical Laboratory Specialist in Molecular Biology (CLSpMB) by the National Credentialing Agency for Laboratory Personnel (NCA) and as a Technologist in Molecular Pathology MP(ASCP) by the American Society for Clinical Pathology.

CURRICULUM

Fall

CLS 405 Introduction to Molecular Diagnostics	2
CLS 401 Basic Laboratory Techniques	1
CLS 327 Laboratory Operations	2
CT 323 Medical Genetics	2
CLS 417 Management and Education	2
CLS 312 Hematology I	3
CLS 418 Current Topics in Molecular Diagnostics	1

Spring

CLS 416 Advanced Molecular Diagnostics	3
CLS 427 Clinical Molecular Laboratory I	7
HS 310 Pathology	3

Summer

CLS 428 Clinical Molecular Laboratory II	5
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Contact:

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The Department also offers an upper-division two-year program offering a baccalaureate degree in Clinical Laboratory Sciences with certification eligibility as a Clinical Laboratory Scientist AND Specialist in Molecular Biology.

