

STONY BROOK UNIVERSITY
MEDICAL MOLECULAR BIOLOGY PROGRAM
Technical Standards

Please carefully read and consider the following documents and indicate that you have done so by providing your signature in the space provided at the end of this document.

Technical Standards for the Medical Molecular Biology Program

Procedure

- These essential functions are presented to the applicant in terms that the individual will fully understand so that the student knows what is expected in order to complete the MMB Program curriculum of study.
- Students accepting an offer of admission to MMB program at Stony Brook University are required to sign a Certification Form confirming their understanding and ability to carry out the Technical Standards with or without reasonable accommodation.
- If a prospective student has any questions pertaining to Technical Standards, they are to contact the MMB department at Stony Brook University.
- Stony Brook University (SBU) complies with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. If a prospective student who is otherwise qualified requires a reasonable accommodation, they should contact Disability Support Services at SBU. Technical standards must be met with or without accommodations.

Technical Standards in Medical Molecular Biology for Admission and Retention

Stony Brook University (SBU) complies with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. If a prospective student who is otherwise qualified requires a reasonable accommodation, they should contact Disability Support Services at SBU. Technical standards must be met with or without accommodations.

The technical standards outlined below (“Technical Standards”), in conjunction with established academic standards, are followed by the Admissions Committee to select students who possess the intelligence, integrity, physical, and personal as well as emotional characteristics that are necessary to become an effective Molecular Biology Scientist. The MMB program and Stony Brook University must maintain the integrity of the curriculum and preserve those elements deemed essential to the education of a clinical laboratory scientist. The MMB program and Stony Brook University cannot compromise the health and safety of others and reserve the right not to admit any applicant who cannot meet the Technical Standards or who would constitute a direct threat to the health and safety of others, e.g., those individuals who are currently impaired by alcohol or substance abuse cannot meet the Technical Standards.

Candidates must also have the physical and emotional stamina to function in a competent manner in educational and practice settings that may involve heavy workloads and stressful situations and the organizational and time management skills required to successfully complete online courses. Accordingly, candidates for the degree must be able to perform specific essential functions that the faculty deem requisite for the practice of clinical laboratory sciences.

Students preparing for a career in Medical Molecular Biology are expected to perform clinical laboratory testing safely and accurately. Students must be able to perform the following essential functions. These functions, expressed as Technical Standards, fall into several broad categories, including: observation; communication; psychomotor and mobility; intellectual and cognitive; behavioral and social; professional

demeanor and professional behavior; ethical standards; and academic performance. The Technical Standards include:

Observation:

The applicant/student must be able to accurately observe demonstrations and exercises in which biological fluids, tissue and products are being tested for their biochemical, hematological, immunological, and microbiological components. The applicant/student should be able to characterize color intensity, odor, clarity, and viscosity of biologicals, reagents, or chemical reaction products. These determinations are often made by the aid of simple and complex instruments and microscopes. In summary, the applicant/student must be able to possess functional use of the senses of smell and vision and somatic sensation.

Communication:

Applicants/students must be able to communicate orally and in writing in the English language. The ability to read and comprehend written material is essential in order to correctly and independently perform laboratory test procedures. The applicant/student must be able to communicate effectively and efficiently in English with all members of the healthcare team.

Psychomotor Skills and Mobility:

Applicants/students must have sufficient motor function and mobility to perform all tasks that are normally expected within the scope of practice of the Clinical Laboratory Scientist in the workplace. For example, students must possess the psychomotor skills to manipulate various instruments that require eye-hand coordination, perform manual laboratory procedures with dexterity and possess the ability to operate computers. Mobility examples include performing laboratory tests where adhering to existing laboratory safety standards, performing moderately taxing continuous physical work that may require prolonged sitting and/or standing over several hours, and some may take place in cramped positions. Students must be able to reach laboratory benchtops and shelves, patients lying in hospital beds, or patients seated in specimen collection furniture.

Intellectual and Cognitive Abilities:

Applicants/students must be able to measure, calculate, analyze, synthesize, integrate, and apply information. The applicant/student should be able to use sufficient judgment to recognize and correct performance, and problem solve unexpected observations or outcomes of laboratory test procedures.

Behavioral and Social Attributes:

Applicant/students must possess the emotional health required to use their intellectual abilities fully, such as exercising sound judgment, promptly completing all responsibilities, being able to work safely in a changing and stressful environment, displaying flexibility and functioning independently in the face of uncertainties or problems that might arise. For example, the student must adapt to working with potentially infectious and unpleasant biologicals. The student must recognize potentially hazardous materials, equipment, and situations and proceed safely in order to minimize risk of injury to patients, self, and nearby individuals.

Professional Demeanor / Professional Behavior:

Applicants/students must demonstrate professional demeanor and behavior in dealing with peers, faculty, staff, and patients. The student must exhibit professional behavior by conforming to appropriate standards of dress, appearance, language, and public behavior. For example, body piercing, other than ears, and visible tattoos are not considered professional appearance. The student must show respect for

individuals of different ages, ethnic backgrounds, religions and/or sexual orientation. The student must be able to critically evaluate his or her performance, accept constructive criticism, and seek methods to improve. The student must be able to evaluate the performance of fellow students and tactfully offer constructive comments.

Ethical Standards

Applicants/students must demonstrate ethical behavior in dealing with peers, faculty, staff, and patients. Adherence to the strict codes of confidentiality of the patient and their medical records is essential. Furthermore, the student must be forthright about errors or uncertainty.

Academic Performance:

Applicants/students must be able to obtain relevant information from lectures, seminars, laboratory sessions or exercises, clinical laboratory practicums, and independent study assignments. Students are expected to sit for examinations, both written and oral, complete written assignments, deliver oral presentations, and perform required laboratory practice with and without supervision. Students are expected to provide their own transportation to and from clinical laboratory practicums located at various clinical affiliate institutions around the region.

Technical Standards and Information About Blackboard

The MMB Program utilizes Blackboard for all courses, regardless of whether the course meets on campus or online. Students will need certain computer components in order to participate in MMB courses.

Equipment Requirement for Participation in MMB Courses

- Computer which has either the latest version of Windows (Mac users: OS10 or higher).
- Students will need to utilize Microsoft Office (Word, Excel, PowerPoint). Students should have computer skills and be able to comfortably utilize any of these three Office products.
- Up-to-date version of Firefox or Explorer (Mac users: Firefox or Safari) in order to access Blackboard.
- All students are required to have an email account. If at any time a student's email address changes, the student must update his/her information with: (1) the MMB program; (2) SOLAR; (3) Blackboard – each course you are currently enrolled in.
- Computers must have the ability to hear audio files which will be posted.
- Up-to-date internet modem and cable/internet connections.
- Printers are available at Stony Brook SINC sites for students who do not own a printer.

Visit these Stony Brook web sites for additional information.

About Blackboard

<https://it.stonybrook.edu/services/blackboard/blackboard-students>

Stony Brook's Division of Information Technology's website

<https://it.stonybrook.edu/>

Expectations of Learners

Full participation is necessary for students to be successful in any course. Courses are an interactive learning experience with your peers and instructor. To acquire the

knowledge and skills to meet the objectives of MMB courses, learners are required and expected to meet the following expectations. Students are required to:

- Read and become familiar with the course syllabus including the learner expectations, objectives, and schedule.
- On a daily basis, check email and log on to each course (via Blackboard) for announcements and course updates.

Plagiarism When Using Blackboard

Where appropriate, students may cite from relevant sources when posting to discussion board. This should only be done when the discussion warrants and the teacher permits it. Any information posted to discussion board which is not a student's original thought, **MUST BE** cited– just as if you were writing a paper. Appropriate references must be listed at the end of your posting.

Stony Brook's Library

<http://guides.library.stonybrook.edu/content.php?pid=114624&sid=1895775>

Plagiarism.org

<http://www.plagiarism.org/index.html>

Academic Dishonesty

Intellectual honesty is a cornerstone of all academic and scholarly work, including on-line format. Penalties for misconduct may vary according to the circumstances of each particular case. Penalties may range in severity from verbal warning to expulsion from the University with the reason recorded on the student's permanent transcript. Academic dishonesty is a serious offense and will be treated in accordance with the University's Policies and Procedures Governing Student Academic Dishonesty.

Americans with Disabilities Act

Stony Brook University complies with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. If any student has a physical, psychological, medical, or learning disability that may impact his/her course work, the student is responsible for contacting Disability Support Services, 128 ECC Building, (631) 632-6748 (this building is on west campus). Disability Support Services will determine with the student what accommodations are necessary and appropriate. All information and documentation is confidential.

Criminal Record

Students having a past criminal record must declare this situation at the time of admission. Certain types of criminal offenses may result in an inability to receive professional licensure and job offers upon graduation. Before starting the program, students in this situation must speak with the program director to determine the extent of possible future difficulties with this issue.

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**I have read and understand the Technical Standards for the Medical Molecular Biology
Program.**

Last name _____ First name _____

Signature _____ Date _____

Sign and complete this page and return to the program.