
School of Clinical Laboratory Science at Santa Barbara Cottage Hospital

Training Program in Clinical Laboratory Science

Program Director:	Lynette Hansen, EdD, MHA, MLS(ASCP)
Stipend:	\$1000.00 per Month
Training Period:	12 months
Training Begins:	Third Monday in September
Class Size:	Up to 6 students
Benefits:	Health and Dental Insurance 10 Discretionary Days Off Forgivable Loan Program

- **The Hospitals**

Cottage Hospital was founded in 1888 by 50 women determined to provide a health care facility for a growing community. These dedicated women raised the initial \$6000 for construction of the town's first hospital. The name "Cottage" was based on the original idea of constructing individual cottages to house various departments. This idea proved to be too costly, so a modest 25 bed redwood building was constructed. Today, Cottage Hospital is a sophisticated 450 bed acute care hospital, making it the largest healthcare facility between Los Angeles and San Francisco. Santa Barbara Cottage Hospital (SBCH) is now one of three hospitals within Cottage Health System, with locations in Santa Barbara, Goleta, and Santa Ynez.

Santa Barbara Cottage Hospital is committed to the teaching and training of future health care professionals by offering training programs in clinical laboratory science, radiology, nursing, and physician residency programs in internal medicine, surgery, and radiology. Cottage Hospital is continually growing to meet the health care needs of the Santa Barbara Community.

- **The Laboratories**

Pacific Diagnostic Laboratories (PDL) is a wholly-owned subsidiary of Cottage Health System. PDL includes the hospital laboratories at Santa Barbara Cottage Hospital, Goleta Valley Cottage Hospital, and Santa Ynez Valley Cottage Hospital. In addition, there is a Core Laboratory serving our outreach patients. The Laboratories within PDL/CHS are licensed by the State of California and accredited by the Joint Commission. The Laboratories collectively perform 5 to 6 million tests annually. The hospital laboratory provides services to an extremely busy emergency department/trauma service, a busy surgical services department, and a critically ill inpatient population. The Core Lab provides services to an extremely robust outreach market. Students will do rotations at both the SBCH campus and the Core Laboratory.

- **The School**

The philosophy of Cottage Hospital School of Clinical Laboratory Science is to provide students with exemplary training and the opportunity to develop the skills and knowledge necessary to become a Clinical Laboratory Scientist. This goal is achieved by providing didactic instruction to students in the theory and clinical application of laboratory tests and

emphasizing hands-on experience in all of the clinical departments. By rotating through Chemistry, Blood Bank, Microbiology, Immunology, Molecular Diagnostics, and Hematology, students experience all aspects of the daily operation of PDL's state-of-the-art clinical laboratories. Students will have access to resources provided by the School library, as well as Reeves Medical Library.

The school is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) and the State of California. The program culminates in the awarding of a certificate of completion. The certificate is granted only after the completion of all program objectives with successful clinical rotation and lecture examination scores. The granting of this certificate is **not** contingent upon the student passing any type of external certification or licensing exam.

Upon completion of the program, graduates are then eligible to take a national CLS certification exam given by a State of California approved agency, such as the exam offered by the American Society of Clinical Pathology (ASCP).

- **The Training Year**

Students will spend 12 months learning the specialties of each individual department in the laboratories. The importance of quality control and quality assurance will be emphasized. Safety in the laboratory is a priority, both for students and all laboratory personnel. Interpersonal skills are fostered through interactions with patients, physicians, clients, and colleagues.

Orientation (1 week)

Students will spend their first week in orientation. The first day will be spent in Hospital orientation reviewing hospital-wide programs, policies, and benefits. The next four days will be spent reviewing School of Clinical Laboratory Science policies, safety policies, program schedules, and expectations.

General Laboratory Techniques (2 weeks)

During the first two weeks of the program, students will receive the majority of their lectures in a workshop format covering general laboratory techniques. Topics include: computers, QC/QA/PT, QM, accreditation, educational methods, management, instrumentation/method evaluation, body fluids/cell counts, use of the microscope, making and staining smears, lab math, troubleshooting skills, and point-of-care testing. Objectives will be met through exams, exercises, and student projects.

Blood Bank (6 week rotation)

During the Blood Bank rotation, all phases of pre-transfusion testing will be covered including ABO/Rh typing, antibody screening/identification, and compatibility testing. Students will also have the opportunity to process various blood components for transfusion and receive an introduction to the responsibilities of the Blood Bank during emergency situations, such as trauma.

Chemistry (10 week rotation)

The Chemistry rotation consists of routine and special chemistry procedures including therapeutic drug monitoring, electrophoresis, and immunoassay. Students will learn about test analytes, clinical significance, and testing methodologies. Using the Laboratory's state-of-the-art instrumentation, students will become familiar with the automation and computerization of the modern clinical laboratory. Quality control reports are used to troubleshoot and problem-solve. Students will also get the opportunity to participate in a method evaluation.

Electrophoresis (2 week rotation)

The Electrophoresis rotation included an introduction to electrophoresis and immunofixation techniques. The students will learn the principles behind the instruments. Training will include evaluating electrophoresis patterns migration patterns and clinical correlation to disease states.

Immunology (4 week rotation)

The immunology rotation consists of special serological procedures including immunofluorescent assays and enzyme immunoassays. Students will get the opportunity to work with a variety of automated, semi-automated and manual procedures.

Urinalysis (4 week rotation)

Students will spend two weeks at the hospital lab and two weeks at the Core Lab performing various automated and manual urinalysis techniques. They will learn about physical, chemical, and microscopic evaluation of urine samples. Students will also learn about special procedures, such as semen analysis, done as part of the urinalysis workstation.

Hematology (7 week rotation)

The Hematology rotation includes the study of whole blood components with emphasis placed on procedures (automated and manual) for the diagnosis of leukemias, anemias, and infectious diseases. The analysis of various body fluids will also be covered. Students will gain proficiency at evaluating peripheral smears and performing manual differentials. Automated and manual procedures for the assessment of coagulation disorders are discussed.

Coagulation (2 week rotation)

The Coagulation rotation will be completed at the hospital lab. There students will encounter both the routine analysis of coagulation testing as well as the evaluation of coagulation in trauma patients, coagulopathies, monitoring of anticoagulated patients. Coagulation methodologies and principles are incorporated into evaluation of testing results

Flow Cytometry (1 week rotation)

Students will receive an introduction to flow cytometry and gain perspective into how this type of analysis can assist the Pathologist in diagnosing disease. This rotation occurs after the Hematology rotation.

Molecular Diagnostics (1 week rotation)

This rotation at the core lab will provide an introduction to molecular testing and provide insight into the current methodologies used in a reference lab setting to determine and evaluate the presence of genetic material in a sample.

Microbiology (9 week rotation)

The Microbiology rotation will develop and enhance the student's awareness of diagnosing and treating infectious diseases. The rotation will include training in routine aerobic and anaerobic bacteriology, mycology, mycobacteriology, and virology. Susceptibility testing and clinical relevance of patient samples will be discussed to foster student's decision-making skills. Students will be introduced to various automated microbiology systems, as well as standard manual techniques used to identify microorganisms.

Parasitology (3 week rotation)

Parasitology is presented in a workshop format including lecture, multimedia, introduction to specimen processing, and the microscopic evaluation of prepared smears. Students will have the opportunity to apply their diagnostic skills as part of the Microbiology rotation.

Enhancement Sites: Healthcare Delivery Systems

During some rotations, students will be scheduled for various field trips to local facilities to observe the application of clinical laboratory science at different venues. Students will spend one day at the local blood donor center to observe donor and component processing. The use of point-of-care testing as part of the healthcare delivery system will be emphasized.

Central Processing and Phlebotomy (ongoing)

Phlebotomy skills on adults and adolescents will be developed throughout the year. An introduction to infant and pediatric phlebotomy will be provided. Students will be assigned to morning phlebotomy rounds in the first three weeks of Orientation and General Lab Techniques. These assignments are provided so that the students can develop their phlebotomy skill and gain competence. Instruction will emphasize the importance of proper specimen collection and processing as the first step in quality testing and ultimately, quality patient care. Emphasis is placed on the importance of comprehending preanalytic variables and the evaluation of proper sample collection and the impact on accurate patient results.

- **Admission Requirements**

Applicants must have a BA or BS degree in biological science or its equivalent with a minimum overall and science GPA of 2.5, and satisfy the requirements for a California Clinical Laboratory Scientist Trainee license. Students with foreign degrees must have a transcript evaluation from an acceptable evaluation agency and complete thirty semester hours from a U.S. college or university and be conversant in English.

Requirements for the California Clinical Laboratory Scientist Trainee license include the following:

Eighteen semester or equivalent quarter hours of biological science. Medical microbiology, hematology, and immunology are required courses. Parasitology, virology, and mycology are recommended. Anatomy, physiology, and molecular biology courses are also recommended.

Sixteen semester or equivalent quarter hours in chemistry. Analytical chemistry (quantitative analysis) and biochemistry are required courses. Clinical chemistry is recommended.

Three semester or equivalent quarter hours in physics, including instruction in principles of light and electricity. Electronics, instrumentation, and computer courses are recommended.

Three semester or equivalent quarter hours in mathematics. Statistics is highly recommended.

- **Selection Criteria**

Students will be selected based on a comprehensive evaluation of the following documentation:

Grade Point Average (overall and science)
Coursework completed and grades achieved for those courses
Has the GPA improved in the last 2 years of college/university
Required courses completed within the past 3 years
Living in the Santa Barbara area or attending local colleges/universities
Work experience within the past 2 years (clinical laboratory related, laboratory related, nonlaboratory related)
Letters of recommendation from two instructors and an employer
Evaluation of the handwritten letter of intent
Personal interview

Points are awarded based on an evaluation of each criterion, and an overall score is calculated. The final selection of candidates is based on both the overall score, and input from teaching supervisors present at the personal interview. Selected students must pass a pre-training health screen (physical exam, PPD, and urine drug screen) prior to beginning the program.

- **Miscellaneous Benefits/Expenses**

Students will be provided with lab coats. The Hepatitis B vaccine is offered to students free of charge. Minor expenses may be incurred in connection with field trips and seminars. Students will be expected to purchase required textbooks. Exam fees for licensing/board exams are the student's responsibility. Costs are estimated to be approximately \$500.

Students are given a \$1000 per month stipend paid bi-weekly. If it becomes necessary to extend the program beyond 52 weeks (medical or other emergency), no additional stipends will be issued during that time. The maximum amount of time allowed for program extension is four (4) weeks.

Students will sign an Agreement for Services Contract during orientation, which distinguishes them as students, not employees of the institution. Because of this, we cannot offer paid work hours at any hospital with Cottage Health System in addition to the formal training program.

- **Rules and Regulations**

Students are expected to adhere to all Hospital, Laboratory and School policies and all State and Federal regulations. Policies, procedures, and regulations will be reviewed with students during their orientation to the program.

- **Causes for Dismissal**

Failure to meet the academic requirements of the program will be cause for dismissal. The following are reasons for automatic dismissal from the program:

1. Falsifying laboratory results
2. Cheating on any administered examination
3. Violation of any Hospital, Laboratory or School policies, including safety policies
4. Performance not consistent with good patient care or the public interest

- **Dismissal or Resignation from the School of Clinical Laboratory Science**

All students who have either been dismissed or who have resigned from the School of Clinical Laboratory Science will be processed according to the following procedure:

1. This procedure will only go into effect after all indicated counseling and grievance procedures have been initiated per the Academic and Professional Standards policy and the Grievance policy.
2. Intern department rotations may be extended, at the discretion of the Program Director, in order to allow the intern more time to complete objectives. However, the maximum amount of time that will be allowed for program extension is four (4) weeks. If it becomes necessary to extend the program beyond 52 weeks, no additional stipends will be issued during that time.

3. Human Resources form 141 (Termination Report) will be filled out by the Program Director and signed by the Program Director, General Manager, and the Intern. This form will be forwarded to Human Resources when completed.
4. The intern will be issued a final stipend check for any hours attended in the program during that last pay period. The check will be available on the regular payday following the end of the last pay period that the student attended the program.
5. All property of the School of Clinical Laboratory Science (references, lab coats, and ID badges) must be returned and noted on the Human Resources form 419: Separation Check-Out Procedure.

- **Application Process**

All qualified applicants are invited to apply to the Program. Applicants will be evaluated without regard to age, sex, race, religion, color, national origin, sexual orientation, veteran status, marital status, or any other legally impermissible factor.

The application deadline for classes beginning in September is February 1st. All documents are to be sent directly to the School of Clinical Laboratory Science. Interviews will be required of selected applicants, who will be notified by phone. Up to six students will be chosen for classes beginning each September.

For more information, call, write, or e-mail Program Manager:

Joshua Davis

**Cottage Hospital School of Clinical Laboratory Science
454 South Patterson Avenue
Santa Barbara, CA 93111
(805) 879-8182
j3davis@sbch.org**

For information about accreditation requirements for the School of Clinical Laboratory Science, please contact:

**National Accrediting Agency for Clinical Laboratory Sciences
5600 N. River Road
Suite 720
Rosemont, IL 60018
P: (773) 714-8880
F: (773) 714-8886
e-Mail: info@naaccls.org
www.naaccls.org**

SANTA BARBARA COTTAGE HOSPITAL
School of Clinical Laboratory Science

MISSION STATEMENT

The mission of the School of Clinical Laboratory Science is to provide the highest quality of science education to future laboratory professionals through a commitment to continuous improvements in training, education, professional development, competency assessment, and student and employee satisfaction.

GOALS AND OBJECTIVES

The goal of the School of Clinical Laboratory Science is to provide students with the opportunity to develop the knowledge and skills necessary to become competent Clinical Laboratory Scientists. Upon completion of the program, students will be able to achieve the following objectives:

1. Develop and establish procedures for collecting, processing, and analyzing biological specimens and other substances. Properly collect specimens and maintain their integrity for quality results.
2. Perform analytical tests on body fluids, cells, and other substances.
3. Integrate and relate data generated by the various clinical laboratory departments while making decisions regarding possible discrepancies.
4. Confirm abnormal results, verify quality control procedures, execute quality control procedures, and develop solutions to problems concerning the generation of laboratory data.
5. Make decisions concerning the results of quality control and quality assurance measures, and institute proper procedures to maintain accuracy and precision.
6. Establish and perform preventive and corrective maintenance of equipment and instruments as well as identify appropriate sources for repair.
7. Develop, evaluate, and select new techniques, instruments, and methods in terms of their usefulness and practicality within the context of the laboratory's personnel, equipment, space, and budgetary resources.
8. Promote professional conduct through interpersonal skills with patients, laboratory personnel, other health care professionals, and the public.
9. Establish and maintain continuing education as a function of growth and maintenance of professional competence.
10. Provide leadership in educating other health personnel and the community.
11. Exercise the principles of management, safety, and supervision.
12. Apply the principles of educational methodology.
13. Develop skills for use of current information systems.

TECHNICAL COMPETENCIES

1. Performs phlebotomy on adult patients from all units (oncology, medical, surgical, critical care, emergency) in the hospital, including outpatients. Maintains specimen integrity and processes specimens taking into consideration the type of specimen and the tests ordered.
2. Performs analytical testing and interprets data generated on blood, body fluids and other specimens utilizing automated, semi-automated, and manual procedures.
3. Integrates data generated by the various clinical laboratory departments and relates them to make decisions regarding possible discrepancies. Evaluates specimen integrity, analyzer performance, and patient diagnosis in order to resolve discrepancies and insure accurate test results.
4. Confirms abnormal test results, evaluates possible erroneous results, verifies quality control results, applies quality assurance protocols, and successfully troubleshoots problems related to the generation of accurate laboratory data.
5. Applies the Westgard rules to quality control data and initiates appropriate procedures to troubleshoot problems in order to maintain test accuracy and precision.
6. Performs routine preventive maintenance (daily, weekly, monthly) on all analyzers. Successfully troubleshoots analyzer problems and initiates the appropriate repairs. Identifies when a problem requires placing a service call for technical help.
7. Evaluates and selects new tests, analyzers or methods in terms of their usefulness and clinical application within the context of a laboratory's personnel, equipment, space, and budgetary resources when given a case study or possible scenario. Objectively evaluates published research studies.
8. Demonstrates professional conduct through positive interactions with patients, laboratory personnel, other healthcare professionals, and the public. Demonstrates good verbal and written communication skills and adheres to all laboratory and hospital policies, including all safety policies. Toward the end of a rotation, works as a functioning member of the team.
9. Attends continuing education events sponsored by the laboratory and applies new information as part of professional conduct and professional development.
10. Applies educational methodologies to present case studies to the department and participate in the training of other healthcare professionals regarding laboratory services.
11. Applies the principles of management (financial and human resource) when given case studies or possible scenarios. Participates with the ongoing preparation for accreditation inspections.

12. Demonstrates functional ability to utilize laboratory computer systems for analysis and information management.
13. Demonstrates an understanding of various healthcare delivery systems as they affect laboratory services by giving a presentation to the department after field trips to various local laboratories.
14. Demonstrates an understanding of the performance improvement process by participating on a performance improvement team project.
15. Demonstrates knowledge of critical pathways and clinical decision-making.

ESSENTIAL FUNCTIONS

1. Demonstrates professionalism, communication, and compassion with regard for human dignity.
2. Maintains the highest standards of conduct in hospitality, excellence, appearance, attitude, respect, and teamwork.
3. Uses best judgment in all interactions with customers, which includes patients, families, coworkers, medical staff, community members, and all other persons.
4. Demonstrates responsibility in maintaining confidentiality of hospital information and data within the scope of the position.
5. Cooperates fully in all risk management activities and investigations.
6. Performs phlebotomy on patients 13 years of age and older. Interns will receive an introduction only to newborn and pediatric phlebotomy.
7. Performs all routine laboratory procedures, and at least, observes complex laboratory procedures that are done infrequently.
8. Prepares reagents and performs preventative maintenance on all assigned instrumentation.
9. Evaluates quality control data and validity of test results obtained.
10. Evaluates patient test results for validity and appropriateness of test orders.
11. Performs basic troubleshooting on all assigned instrumentation.
12. Maintains all laboratory records as required.
13. Attends all scheduled didactic lectures and writes all appropriate exams with at least minimal passing scores.
14. Attends all clinical rotations as scheduled with appropriate "make-up" time if deemed necessary by School authorities.
15. Prepares for all scheduled didactic lectures and practical experiences by reviewing appropriate objectives and completing adequate reading on assigned topics prior to the daily assignment.
16. Performs other assigned tasks, as required for completeness of training, and functions as a Clinical Laboratory Scientist I level after completion of training in a given department rotation.

ESSENTIAL FUNCTIONS

Physical Requirements

1. Ability to work shifts starting as early as 0500.
2. Sufficient manual dexterity and eye-hand coordination to perform the following: pipetting, aliquoting, making dilutions, loading automated analyzers, performing manual analytical testing, processing specimens, setting microbiology specimens, processing blood products, and drawing blood.
3. Sufficient visual acuity to read microagglutination procedures and utilize a variety of measuring devices (ex. Sed rates, hemacytometers, syringes, volumetric and serological pipettes).
4. Functional ability, including visual acuity, to utilize a microscope for microscopic examination of prepared slides.
5. Functional ability to discriminate colors.
6. Functional ability to read and follow instructions.
7. Functional ability to utilize and interpret data to problem-solve and troubleshoot.
8. Functional ability to utilize a variety of computer systems, including PCs.

PROGRAM OFFICIALS

Program Director: Lynette Hansen, EdD, MHA, MLS(ASCP)

Program Manager: Joshua Davis, CLS, MLS(ASCP)

CLINICAL LABORATORY SCIENCE ADVISORY COMMITTEE

Lynette Hansen, EdD, MHA, CLS, MLS(ASCP)	Program Director
Joshua Davis, CLS, MLS(ASCP)	Program Manager
Stewart Comer, MD	Pathologist/Medical Director
Lynnette Alexander	HR Consultant
Allison Reitz, CLS, MLS(ASCP)	Manager Technical Quality POCT
Amy Luong, MHA, CLS, MLS(ASCP)	Manager (SBCH)
Lisa Heinrichsen, CLS, MLS(ASCP)	Manager (Core Lab)
May Wong-Droese, CLS, MLS(ASCP)	CLS Resource
Paola Rubio, MBA, MLS(ASCP)	Technical Specialist Chemistry
Pooja Bavkar, CLS, MLS(ASCP)	Technical Specialist Hematology
Harlan Rincon, CLS, MLS(ASCP)	Technical Specialist Blood Bank
Jessica Barraza, CLS, MLS(ASCP)	Technical Supervisor (SBCH)
Eric Romo, CLS, MLS(ASCP)	Technical Supervisor (Core Lab)

SCIENTISTS PRIMARILY INVOLVED WITH STUDENT TRAINING

Michael Baugh, CLS, MLS(ASCP)	Chemistry (SBCH)
Dennis McDaniel, CLS, MLS(ASCP)	Hematology (Core Lab)
May Wong-Droese, CLS, MLS(ASCP)	Hematology (SBCH)
Darryl Hein, CLS, MLS(ASCP)	Coagulation/Urinalysis (SBCH)
Lesser Michaels, CLS, MLS(ASCP)	Urinalysis (Core Lab) Flow
Clara Llanos, CLS, MLS(ASCP)	Cytometry (Core Lab)
Teresa Savage, CLS, MLS(ASCP)	Microbiology (Core Lab)
Loretta Castonia, CLS, MLS(ASCP)	Microbiology (Core Lab)
Sessily Kloeppel, CLS, MLS(ASCP)	Blood Bank (SBCH)
Valerie Evans, CLS, MLS(ASCP)	Blood Bank (Core Lab)
Peter Schwab, CLS, MLS(ASCP)	Electrophoresis (Core Lab)
Erica Villanueva, CLS, MLS(ASCP)	Serology (Core Lab)
Garrett Gonzales, CLS, MLS(ASCP)	Molecular (Core Lab)

INSTRUCTIONS AND INFORMATION FOR TRAINEE APPLICANTS

The complete application to the School of Clinical Laboratory Science should contain the following materials:

Standardized Application Form
Clinical Laboratory Scientist Trainee License (see #2)
Transcripts of all College and University work (see #3)
Letters of Recommendation (see #5)
Supplemental Documentation (see #7)

1. APPLICATION PROCEDURE **START EARLY!**

If possible, start the application process early in the senior year. Complete the following items and send, or have them sent, to the School of Clinical Laboratory Science:

Standardized Application Form
Letters of Recommendation
Official Transcripts
Form 311 - Status of Trainee License from the State of California
(Trainee license will not be available until after the Bachelor's degree, but the application process should be started well before graduation)

2. STATE OF CALIFORNIA REQUIREMENTS FOR TRAINING

Information concerning the requirements for California State Licensure as a Clinical Laboratory Scientist Trainee may be obtained from the California Department of Public Health. All candidates accepted into clinical training are required to have this training license. To obtain a trainee license, the applicant should write or phone the office listed below requesting application forms and accompanying instructions.

California State Department of Public Health
Laboratory Field Services
850 Marina Bay Parkway, Bldg P, 1st Floor
Richmond, CA 94804-6403
(510) 873-6327

NOTE: When clinical training begins, you will be required to present your license for display in the laboratory in which you will be receiving training. It is illegal to reproduce the license in any manner.

3. TRANSCRIPTS

Each CLS trainee is required to provide official copies of transcripts for all college and/or university work completed. An official transcript is one that is signed by the Registrar where the student is/was in attendance, imprinted with the institutional seal, and is mailed directly from the Registrar to its respective destination(s) without being accessible to the student. Official transcripts are required to be sent to each of the following:

4. FOREIGN STUDENT APPLICATION

Students with foreign degrees must have a transcript evaluation from an acceptable evaluation agency and complete thirty (30) semester hours of coursework from a U.S. college or university. Foreign students must be conversant in English.

5. LETTERS OF RECOMMENDATION

All student applicants are required to submit letters of recommendation from two (2) science instructors. Please ask the instructors to use the standardized letters of recommendation after you have completed the identifying information at the top of the forms. These letters are to be mailed directly by the instructors to the School of Clinical Laboratory Science. Also, send a letter of recommendation from a former or current employer. These individuals may use company letterhead, rather than the standardized form. This letter of recommendation should also be sent directly to the School of Clinical Laboratory Science.

6. INTERVIEWS

A personal interview will be required of selected applicants. Interviews will be conducted six (6) months prior to the beginning of the training year in September.

7. SUPPLEMENTAL DOCUMENTATION

A handwritten letter of intent is required of all applicants. This letter should be mailed directly to the School of Clinical Laboratory Science and should include information about professional goals, reasons for interest in the field of Clinical Laboratory Science, and why the applicant is interested in the program at Santa Barbara Cottage Hospital.

8. PREVIOUS EDUCATION

Students who have completed their education and received their degree in excess of seven (7) years prior to their date of application for admission into clinical training are required to have recent coursework (including laboratory sections) in Medical Microbiology and Biochemistry.

9. HELPFUL HINTS AND SUGGESTIONS

- Apply early to allow for delays.
- Please try to type the information on all forms. If a word processor is not available, then print clearly in large bold letters in black ink.
- Keep copies of all application materials and a dated record of the application process.

SELECTION REQUIREMENTS AND CRITERIA REMAIN AT THE DISCRETION OF THE
SCHOOL OF CLINICAL LABORATORY SCIENCE OFFICIALS