



*The William O. Green, Jr., M.D.*  
**Medical Laboratory Science Program**



*Founded in 1969*

*Accredited by the National Accrediting Agency for  
Clinical Laboratory Sciences (NAACLS)*

*5600 N. River Road*

*Suite 720*

*Rosemont, IL 60018-5119*

*(773)-714-8880*

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School of Medical Laboratory Science

The Valley Hospital

223 North Van Dien Avenue

Ridgewood, NJ 07450

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***William O. Green, Jr., M.D.  
Medical Lab Science Program  
The Valley Hospital  
223 North Van Dien Avenue  
Ridgewood, NJ 07450***

***Note to applicants: All applicants are required to:***

- 1. Review this catalog in its entirety.***
- 2. Submit a completed application with a non-refundable application fee of \$50 payable to The Valley Hospital.***
- 3. Submit a hand-written essay (see application).***
- 4. Submit an official copy of college transcript.***
- 5. Submit 3 letters of recommendation from individuals familiar with your academic performance.***

***Details of the application process are described in the catalog.***

***APPLICATION DEADLINE: October 31.***

***Mail all correspondence/payments to:***

***The Valley Hospital  
Marietta Tomlin, Director of the MLS Program  
Department of Pathology and Laboratory Medicine  
223 North Van Dien Avenue  
Ridgewood, NJ 07450***

***[http://www.valleyhealth.com/Programs\\_Services.aspx?id=1774](http://www.valleyhealth.com/Programs_Services.aspx?id=1774)***

***Note: If correspondence is not mailed to the address as printed above, it may not reach the office of the program by the specified deadlines.***

***Make application fee payable to “The Valley Hospital”.***

# ***INTRODUCTION***

By definition, a medical lab scientist is a scientist who is:

*"An allied health professional skilled in both the theory and practice of medical laboratory procedures that provide data used by physicians to determine the presence, extent, and cause of disease."*

Medical Lab Scientists are an integral part of the network of individuals who contribute to the wellbeing of thousands of people each day. They perform a wide range of laboratory analyses using complex precision instruments, and are responsible for confirming the accuracy of test results, and ultimately reporting those results. Often, these results contribute to an accurate diagnosis and also influence the course of a patient's treatment.

One of the keys to being successful in the field of medical technology is an ability to understand the relationship between those who require our care and those who provide that care. A medical scientist needs to develop a commitment to the profession, and a clear understanding of the importance of his/her role within the medical community.



The beginning of medical technology as a profession dates back to the 14th century at the University of Bologna in Italy. A young lady was employed to perform certain tasks that would now be considered those of a medical technologist. The mid-nineteenth century brought the development of dyes and bacteriological culture media, and a new knowledge of chemical reactions that provided the beginnings of modern clinical chemistry. Dr. Victor V. Vaughan opened the first chemical laboratory related to medicine in the United States at the University of Michigan in 1844. Years later, a medical school opened at the university, and a department of pathology was established.

Careers in medical technology are available in hospital laboratories, forensic laboratories, reference laboratories, molecular diagnostics, veterinary offices, doctor's offices, management, industry, pharmaceutical and cosmetics industries, medical sales, and educational and research institutions.

The Bureau of Labor Statistics of the U.S. Department of Labor projects that the employment of clinical laboratory workers is expected to grow by 6.5 percent between 2021 and 2031, faster than the average for other occupations. In May 2022, the median annual wage for medical and clinical laboratory technologists was \$59,130.

Through an educational program, such as the one at The Valley Hospital, medical technology students can acquire the skills necessary to become a valuable health care professional.

# ***PROGRAM INFORMATION***

## **MISSION STATEMENT**

The mission of our program is to prepare qualified individuals to enter the profession of medical laboratory science with the knowledge, skills, and attitudes necessary to achieve competence, and to demonstrate continued professionalism and growth throughout their careers. The curriculum will emphasize proficiency in the evaluation of clinical laboratory data in order to assess results and synthesize resolutions for both technical and non-technical issues. Through this experience, graduates will thus be prepared for future roles in clinical laboratory science, research, education, and administration.

## **PROGRAM GOALS AND OBJECTIVES**

The goal of the William O. Green, Jr., M.D., Medical Lab Science Program at The Valley Hospital is to provide an educational program which will help to provide well-trained Clinical Laboratory Scientists/Medical Technologists to the medical community. The goal will be met by the combination of practical and didactic preparation in courses with specific objectives. This professional block (clinical experience) is designed to develop the students' abilities through the cognitive domain, with a well-defined body of knowledge; affective domain by developing communication, problem-solving and professional skills; and psychomotor domain by building a core set of transferable laboratory competencies which the student can perform at the entry level in a clinical setting.

The program objectives exist in three domains, and are as follows:

### **Cognitive**

Upon completion of the clinical experience the student will demonstrate factual knowledge of the material contained within the course which covers a minimum body of knowledge in the field of Clinical Laboratory Science/Medical Technology. More specifically, they include:

- The student will be able to describe specimen processing, collection, labeling, and storage, explain physiological or immunogenic theory, and describe analyses and methods applicable to: Body Fluid Analysis, Transfusion Medicine/ Immunohematology, Hematology, Immunology/Serology, Clinical Chemistry, and Molecular Diagnostics.
- The student will be able to describe pre-analytical, analytical, and post-analytical variables affecting collection and testing of samples, and the reporting of results.
- The student will be able to describe staining characteristics, specimen collection, media selection, and incubation conditions of routine and unusual bacteria, parasites, fungi, and viruses, where appropriate. The student will recognize colonial morphology, biochemical and serological reactions, and antibiotic sensitivity

- patterns of routine bacteria, parasites, fungi, and viruses where appropriate.
- The student will be able to evaluate results to recognize health and disease states, assess validity and accuracy of procedures, determine inconsistent results; take corrective action, and report the need for additional/confirmatory testing.
  - The student will be able to describe the essential components, principles of operation, preventive maintenance of representative equipment used in the Laboratory.
  - The student will be able to discuss the essential components of Educational Methodologies as they apply to the clinical experience.

### **Affective**

In the areas of professionalism and ethics, and professional practice, the students will exhibit the following behaviors:

- Communicate effectively in written and spoken English
- Appropriately assess verbal and nonverbal communications.
- Follow written and non-written verbal directions.
- Read typewritten text from hard copy and computer monitors.
- Work independently and with others under time constraints.
- Prioritize requests and work concurrently of at least two different tasks.
- Accept constructive feedback.
- Maintain alertness and concentration during a normal learning period.
- Apply knowledge, skills, and values learned from work and life experiences to new situations.
- Show respect for self and others.
- Project an image of professionalism including appearance, dress, and attitude.
- Demonstrate professional ethics, which includes Patient Confidentiality.
- Demonstrates safety measures.

### **Psychomotor**

The performance of a prescribed list of routine laboratory tests falls within the psychomotor domain. By the completion of the clinical experience, the student will be able to:

- Perform, using standard laboratory equipment, a list of tasks determined by the program to be essential, transferable skills within the clinical laboratory as practiced in hospitals, clinics, independent laboratories, and physician office laboratories.
- Possess manual dexterity as required by tasks including but not limited to the performance of venipuncture, the operation of delicate instruments and computers, correct utilization of sample measuring devices, and focusing and manipulation of a microscope.

## **ESSENTIAL STANDARDS**

Students enrolling in and graduating from a Medical Laboratory Science program must meet the essential function requirement of the academic program and the profession. Essential Functions are the non-academic standards that a student must be able to master to participate successfully in the program and become employable. Examples of this program's essential functions are provided below.

- *Observe laboratory demonstrations in which biological i.e., body fluids, culture materials, tissue sections and cellular specimens are tested for their biochemical, hematological, immunological, microbiological, and histochemical components.*
- *Characterize the color, odor, clarity, and viscosity of biological samples, reagents, or chemical reaction products.*
- *Utilize a clinical grade binocular microscope to discriminate among the fine structural and color (hue, shading, and intensity) differences of microscopic specimens.*
- *Read and comprehend text, numbers, and graphs displayed in print and on video monitor.*
- *Recognize alarms*
- *Perform laboratory testing adhering to existing laboratory safety standards.*
- *Perform moderately taxing continuous physical work, often requiring prolonged sitting and/or standing, over several hours.*
- *Reach laboratory bench tops and shelves, patients lying in hospital beds or patients seated in specimen collection furniture.*
- *Grasp, hold, transport, and utilize specimens, reagents, hazardous chemicals and equipment in a safe manner as needed to perform laboratory testing.*
- *Obtain patient specimens in a timely, safe, and professional manner (e.g. perform phlebotomy).*
- *Use laboratory equipment (e.g. pipettes, inoculating loops, test tubes) and instruments to perform laboratory procedures according to established laboratory guidelines.*
- *Use computer keyboard to operate laboratory instruments and to calculate, record, evaluate, and transmit laboratory information.*
- *Troubleshoot and correct basic equipment malfunctions.*
- *Read and understand technical and professional materials, (i.e. textbooks, journal articles, handbooks and instruction manuals).*
- *Follow oral and written instructions independently.*
- *Clearly instruct patients regarding specimen collection.*
- *Demonstrate sensitivity, confidentiality and respect when speaking with patients.*

- *Communicate clearly, accurately and tactfully with faculty members, student colleagues, staff and other health care professionals orally and in a recorded format (writing, typing, graphics, or telecommunications).*
- *Possess good eyesight or good corrected vision in order to read typewritten text and data from computer terminals.*
- *Be able to effectively read, write, and communicate using the English language.*
- *Be able to discriminate color in order to identify reagents and other materials such as culture media, stained cell preparations, and physical properties of body fluids.*
- *Possess good manual dexterity as required in such tasks as: performing phlebotomy; operating delicate instruments; handling small containers of potentially bio hazardous materials; utilizing sample measuring devices; and adequately focusing and manipulating a microscope.*
- *Be able to perform some heavy lifting including reagents packages of thirty pounds.*
- *Possess enough hearing ability with or without auditory aids to understand the normal speaking voice.*
- *Be able to traverse hospital and laboratory corridors, passageways, and doorways (minimum width: three feet).*
- *Adjust to changes in environment to accommodate distractions such as moderate noise and activity in the work environment*

All applicants will be required to represent, on the application, that they understand the Technical Standards and believe that they are capable of satisfying them, with corrective devices and/or reasonable accommodations.

### **CAREER ENTRY LEVEL COMPETENCIES**

After successful completion of the clinical experience, through the accomplishment of the above-mentioned objectives, the core set of transferable laboratory competencies which the student can perform at the entry level in clinical laboratory science include:

1. Applies:
  - principles of basic laboratory procedures in order to perform tests
  - principles of special procedures related to testing
  - knowledge to identify sources of error in laboratory testing
  - knowledge of fundamental biological characteristics as they pertain to laboratory testing, in order to interpret laboratory findings
  - knowledge of theory and practice related to laboratory operations
  - knowledge of standard operating procedures

2. Selects:
  - procedural course of action appropriate for the type of sample requested
  - reagents/media according to established procedures
  - instruments to perform tests appropriate to test methodology, according to established procedures
  - appropriate controls for the test performed
  - routine laboratory procedures to verify test results according to established protocol
  - special laboratory procedures to verify test results
  - instruments for new laboratory procedures
3. Prepares:
  - reagents/media for tests according to established procedures
  - instruments to perform tests
  - controls appropriate for testing procedures
4. Calculates:
  - results from test data obtained from laboratory procedures
5. Correlates laboratory data:
  - and clinical data to assess test results
  - and quality control data to assess test results
  - with other laboratory data to assess test results
  - with physiologic processes to assess/validate test results and procedures
6. Evaluates:
  - laboratory and clinical data to specify additional tests
  - laboratory data to recognize common procedural/technical problems
  - laboratory data to verify test results
  - laboratory data to determine possible inconsistent results
  - laboratory data to recognize health and disease states
  - laboratory data to assess validity/accuracy of procedures for a given test
  - laboratory data to take corrective action according to predetermined criteria
  - laboratory data to recognize and report the need for additional testing
  - laboratory data to determine alternate methods for a given result
  - various methods to establish new testing procedures, laboratory, and clinical data to assure personal safety
  - laboratory operational policies
  - test results obtained by alternate methodologies
  - laboratory data to establish reference range criteria for existing or new tests
  - laboratory data to make identifications

Application of knowledge and skills is emphasized. Performance of manual and automated procedures is required. After demonstrating proficiency, students may be permitted to perform procedures under qualified supervision. By the conclusion of the rotation, students are expected to have acquired the knowledge and skills necessary to function as entry-level Medical Laboratory Science professionals.



## **ADMISSION CRITERIA**

The Valley Hospital is currently affiliated with Kean University, Farleigh Dickinson University, Caldwell University, and East Stroudsburg University. Additional affiliation agreements with other colleges or universities will be generated as students from other educational institutes are accepted into the MLS program. Thirty-two (32) college credits are awarded for successful completion of our program, and these credits contribute toward a baccalaureate degree in Medical Laboratory Science (Medical Technology or Clinical Laboratory Science) (3+1 program). Credits awarded for the clinical year are the responsibility of the affiliate university or college and are listed in each respective clinical affiliate catalog. Applicants from our affiliates will be given priority, but consideration is given to students from other schools with an approved temporary affiliation agreement. Any such arrangements must be made six months prior to the commencement of the program. Eligible applicants in such "3+1" programs must complete all course requirements in the core curriculum in Medical Laboratory Science (Medical Technology or Clinical Laboratory Science) at a regionally accredited institution ***prior to beginning our program***. Confirmation of this must be provided in some form by the applicant's advisor. The program is also open to applicants who have completed a baccalaureate degree in Biology, Chemistry, or a related discipline (with completion of the required prerequisite courses). Such applicants are eligible to apply for post-baccalaureate status.

College course requirements for all applicants include those such as biology and general chemistry, organic and/or biochemistry, microbiology, and college math (statistics or biostatistics preferred). Prerequisite courses in human anatomy & physiology, and immunology are required. Survey courses do not qualify as fulfillment of any of the course requirements. A cumulative G.P.A. **of 2.90 is required with a minimum G.P.A. of 2.90 in science courses**. Each applicant's transcript is reviewed for content.

Credits for prior experiential learning, advanced standing, or waiver of program courses will not be granted to any applicant. All students must satisfactorily complete the program in its entirety.

\*All graduates of medical laboratory science programs outside the United States are required to have their transcripts evaluated by an appropriate evaluation agency. For a list of these agencies, contact the American Society for Clinical Pathology (ASCP): ASCP Board of Certification, Chicago, Illinois. [www.ascp.org](http://www.ascp.org)

**All International applicants and applicants whose first language is not English must submit scores received on the Test of English as a Foreign Language (TOEFL):** minimum TOEFL score of 79/80 on the Internet-based test, 213 on the computer-based exam, 550 on the paper-based exam. The TOEFL is administered by the Educational Testing Service (ETS). Applications may be obtained from ETS, Box 6151, Princeton, New Jersey 08541-6151. The results of these tests help applicants determine whether they are prepared to undertake study conducted in English before making extensive plans for study in the US.

Applications may be obtained from The Valley Health System website, and must be submitted during the fall of the year preceding the schools August start date. The application deadline is October 31 for admission the following August. Applicants must also submit official transcripts from all colleges attended by the deadline. Applicants must print three recommendation forms and distribute them to people that can recommend them for the clinical internship. The completed recommendation forms must be submitted separately by the recommenders. Interviews are scheduled for those who meet the initial admission criteria. Following the interview, applicants are evaluated for acceptance into the program. The average number of students accepted to The Valley Hospital, is currently four. Individuals requiring additional information regarding the application process should call the School of Medical Laboratory Science office at: (201)447-8234.

***The Valley Hospital does not discriminate on any basis.***

The selection of students is based solely on academic qualifications, career interest and personal interview. No student will be discriminated against on the basis of race, creed, color, national origin, ancestry, age, marital status, sex, handicap, disability or sexual orientation.

Candidates are notified of acceptance via email. Acceptance is conditional at that time. **Final acceptance is contingent upon the satisfactory completion of prerequisite courses in progress at the time of application, and a favorable report upon a physical examination performed at The Valley Hospital, which includes screening for drugs of abuse and up to date immunization records. Additionally, having no criminal records detected, on a Criminal Background Check. All accepted applicants must submit a final transcript for evaluation prior to beginning the program.** Accepted applicants must confirm their desire to enter the program by the given deadline. Any misrepresentation by the applicant throughout the application process will be cause for non-acceptance.

**EXPENSES**

**Tuition:** The tuition for the program is \$7,500.00. A deposit of \$1000.00, applicable toward the tuition, is due upon confirmation of acceptance. The balance of \$6,500.00 is due 60 days prior to the start of the program. If necessary, arrangements can be made to make payments before the tuition deadline. The \$1000.00 deposit is nonrefundable. For those students attending affiliated colleges and universities, arrangements for payment of tuition will be discussed on an individual basis.

**Textbooks:** The cost of textbooks is a separate expense. The list of required textbooks will be sent to each student from the distributor, and all books are purchased directly by each student from the distributor.

**Liability Insurance:** All students are required to purchase low-cost liability insurance. The insurance program's limits of liability are \$1,000,000 each incident/\$3,000,000 aggregate. The insurance can be purchased online at [www.proliability.com](http://www.proliability.com) and students must provide proof of purchase to the Hospital prior to the start date of the program.

**Uniforms:** While in attendance at the Hospital, the official attire for all students is hospital-style scrubs. All students are required to purchase these scrubs in the designated color "Caribbean Blue." Should a change in the color designation occur, all accepted students will be notified.

**Withdrawal:**

If a student withdraws in writing after the tuition is paid in full, the refund policy is as follows:

*\$6500.00 refunded one month prior to the first day of class*

*\$5500.00 refunded during the first week of class*

*\$4500.00 refunded during the second week of class*

*\$3500.00 refunded during the third week of class*

*No refund after the third week of class*

**FINANCIAL ASSISTANCE**

Limited financial assistance is available to students. Accepted applicants should request an application for financial assistance if desired.

**PROGRAM SCHEDULE**

Contact a program official at (201) 447-8234 for the starting date for the program. The program begins with a one-day mandatory hospital orientation, prior to attending the lab program. The lab program includes an orientation during which the students are introduced to basic techniques, mathematics, and computer applications. Formal lectures are given in each of the principle areas of the laboratory, and the students are then assigned to clinical laboratory rotations. In the majority of laboratory settings, there is a 1:1 instructor to student ratio. Occasionally, depending on class size, there are certain portions of the clinical rotation in which the ratio is 1:2. There is only one instructor per lecture, with the lectures being presented by the Program Director, Clinical Educator, and/or Department Managers, Supervisors, Coordinators, and Staff Technologists as applicable.

The students are typically present at the hospital for 8.5 hours each day. This includes lunch and a morning break. The usual schedule is 7:00 a.m. until 3:30 p.m. Students may be required to slightly alter their starting and ending times in according to their learning activities scheduled for that day.

A Holiday break will be scheduled at the end of December. The students are not expected to report to the laboratory on Christmas Day, New Year's Day, Memorial Day, Labor Day, and Thanksgiving (Thursday and Friday). Time off may be given for alternate days of religious observance.

## **GRADUATION**

After satisfactorily completing all laboratory and lecture requirements, including all assignments and passing a comprehensive final examination, students will be awarded a Certificate in Medical Laboratory Science. Any student who fails the comprehensive examination will take a make-up in those sections failed. A completed transcript (32 credits) will be mailed to the student's affiliated college. A record of all grades is permanently maintained in the student's file. The issuing of a degree (by the student's academic institution) or the Hospital certificate is not contingent upon the student passing any type of external certification or licensure examination (see below).

## **CERTIFICATION EXAMINATIONS**

A student who has successfully completed the hospital program, and has received their baccalaureate degree, is eligible to take the ASCP Board of Certification Examination for Medical Laboratory Scientist and/or any examination for which they satisfy the eligibility requirements. Applications may be obtained from the [www.ascp.org](http://www.ascp.org) website. Scores from the above examinations will be sent to the Program Director.



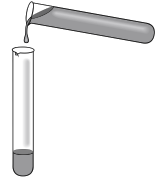
# ***CLINICAL LABORATORY SCIENCE COURSES***

## **COURSE STRUCTURE**

A course syllabus, which contains the course title, duration, instructor(s), textbook, requirements, description, and grading policy, is given to each student at the commencement of each course. This includes both lecture and laboratory courses.

### **CLINICAL CHEMISTRY** (4 credits)

*Metabolism (me-tab'o-lizm) [Gr. metaballein to turn about, change alter] the sum of all the physical and chemical processes by which living organisms grow and maintain themselves, which can be divided into the anabolism (the synthesis of complex materials) and catabolism (the breakdown of complex materials producing energy).*



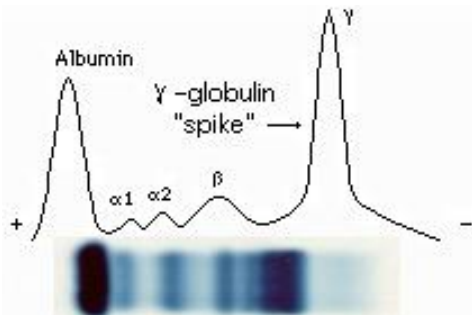
Clinical Chemistry involves quantitative analytic chemistry. A variety of techniques are used to measure numerous analytes (proteins, carbohydrates, and lipids) found in blood and other body fluids. Monitoring the levels of these substances is often critical in the diagnosis and treatment of disease. Integral components of this course include result interpretation and data correlation, and operation, maintenance, and troubleshooting of analytical instruments.

The physiology of acid-base balance, carbohydrate and lipid metabolism, electrolytes, proteins and non-proteins, enzymology, endocrinology, tumor markers, toxicology and therapeutic drug monitoring are some of the topics which are covered extensively in lecture.

The clinical chemistry laboratory is divided into many sections including general chemistry, therapeutic drug monitoring, enzymes, tumor markers, and immunoassays. Students will gain hands-on experience with sophisticated computerized instrumentation by working closely with a member of the technical staff. Students are instructed in the evaluation of both quality control procedures and patient data, accomplished through the correlation of test results with disease.



Computers play a major role in clinical laboratory science. Throughout the year, students are taught numerous computer applications. Being able to use the laboratory's information system appropriately and effectively is an essential skill for today's medical lab scientist.

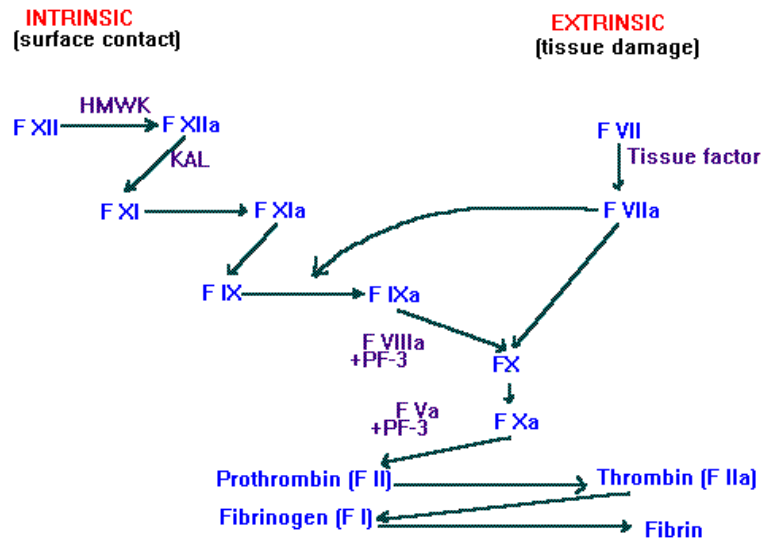


## **HEMOSTASIS & THROMBOSIS (COAGULATION)** (2 credits)

*Hemostasis (he"mo-sta'sis) [hemo- + Gr. stasis - halt] 1. the arrest of bleeding, either by the physiologic properties of vasoconstriction and coagulation or by surgical means. 2. the stagnation or arrest of blood flow through any vessel or to an anatomic area.*

The complicated process of hemostasis involves numerous interdependent factors that are controlled carefully by the body for the purpose of preventing bleeding. When there is an injury to a blood vessel, the hemostatic process is designed to repair the break. The hemostatic mechanism is a series of physical and biochemical beginning with vasoconstriction, formation of a platelet plug, and interaction of blood coagulation factors. These responses culminate in the transformation of fluid blood into a thrombus or clot, which effectively seals the injured vessel. Excessive abnormal bleeding is usually the result of a defect or combination of defects in one or more factors in the coagulation system. Furthermore, there must be a balanced interaction of the fibrinolytic, coagulation and kinin systems. Otherwise, Disseminating Intravascular Coagulation; thrombi formation and other related pathologies can occur.

The coagulation and fibrinolytic processes, abnormal hemostasis, thrombosis, and manifestation of disease are detailed in lecture. In the laboratory, the student will become competent in the performance of automated tests used to monitor normal and abnormal hemostasis: including tests for platelet function, coagulant deficiencies and thrombotic disorders. Additionally, special coagulation tests will be learned and practiced.



**Intrinsic and Extrinsic Coagulation Pathways.**

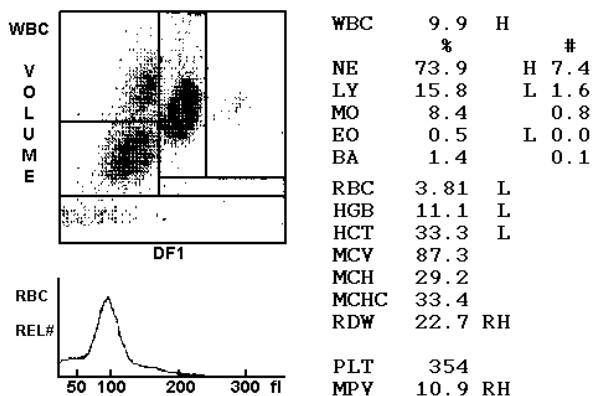
## **CLINICAL HEMATOLOGY** (4 credits)

*Anemia* (ah-ne'me-ah) [Gr. an-neg. + haima blood] a reduction below normal in the quantity of hemoglobin or in the volume of packed red cells per 100 ml of blood. This occurs when the normal equilibrium between red cell loss (through senescence, bleeding, or destruction) and red cell production is disturbed.

*Leukemia* (loo-ke'me-ah) [leuko + Gr. haima blood + ia] a progressive, malignant disease of the abnormal proliferation of the precursors of one type of leukocyte (lymphocytes, granulocytes, or monocytes).

Laboratory tests performed in hematology center around the cells and some of their constituents: their number and concentration, the relative distribution of various types of cells, and their structural or biochemical abnormalities that contribute to disease. The entire range of types of disease is seen: hereditary, immunologic, nutritional, metabolic, traumatic, and inflammatory (including infections, hormonal, and neoplastic). In many instances the hematologic examination is virtually diagnostic, and it is often a major contribution to the eventual solution of a diagnostic problem.

During the student's hematology laboratory rotation, they will become practiced in both manual and automated techniques. A great deal of emphasis is placed on the microscopic evaluation of peripheral blood smears and the identification of cells. Hematology lectures include discussions of the origin and maturation of blood cells, hemoglobin structure and function, and the mechanisms of diseases that involve changes or abnormalities of red blood cells (erythrocytes), white blood cells (leukocytes), and platelets (thrombocytes).



### **Whole Blood Analysis**

## **CLINICAL IMMUNOHEMATOLOGY** (3 credits)

*Blood groups: red cell phenotypes grouped by their antigenic structural characteristics, which are under the control of the various allelic genes. The cell membrane properties that provide the specific antigenicity of the blood groups are called agglutinogens, as they agglutinate or clump in the presence of their specific antibody.*

Immunohematology is synonymous with Blood Banking in the clinical setting. It is the area of the laboratory where pretransfusion testing is performed. The techniques used are based on antigen-antibody reactions. To carry out blood banking procedures, a thorough knowledge of the principles involved, recognition of the many difficulties that may be encountered, and exactness of techniques are essential.



The configuration of antigens on red blood cells is unique to each individual. Blood transfusion recipients may respond to donor red cells by producing antibodies. It is crucial that these antibodies be detected through compatibility testing prior to subsequent transfusions. Errors in pretransfusion testing and in the transfusion process itself can have serious life-threatening implications.

Lecture topics in immunohematology include the development of blood group antigens, in-vitro reactions of red cell antigens and antibodies, autoimmune anemias, hemolytic disease of the newborn, transfusion reactions, donor requirements, and component preparation and indications for use. Students will be instructed in the various serological laboratory techniques involved in ABO and Rh testing, antibody screening, and compatibility testing, and also record keeping, handling of components, and transfusion reaction investigation.

Red Cells tested with:

Anti-A	Anti-B	Blood Group:	% Incidence:
+	neg	A	43
neg	+	B	9
+	+	AB	4
neg	neg	O	44

### **ABO Blood Group Determination**

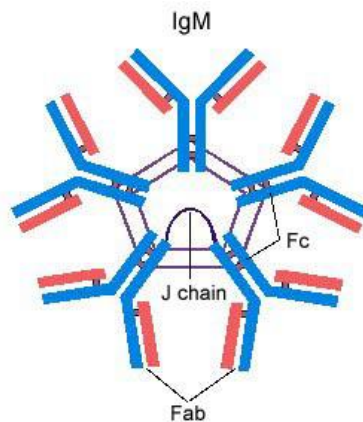


## **CLINICAL IMMUNOLOGY** (2 credits)

*Immunology (im"u-nol'o-je) the study of the factors involved in the response of a host to a specific foreign antigen. The study of the immune response includes humoral elements and cellular elements of immunity, and the assessment of both normal and abnormal immune function, which includes immunodeficiency and autoimmune disease, and hypersensitivity, particularly allergy.*

The body's defense against invading organisms and other foreign substances involves a coordinated, complicated response by various cells and organs. Often, this response culminates in the production of antibodies that may offer life-long protection against repeat infection. Study of the immune system also includes the autoimmune antibodies that can be produced in response to certain of the body's own cells.

Measurement of immune complexes formed by antibody combining reversibly with antigen is a subdiscipline of immunology called **serology**. Many antibodies can be detected and quantitated in the laboratory and used to diagnose and monitor the progress of certain diseases. With the availability of *monoclonal antibodies*, the amount of information obtainable through immunologic testing has expanded enormously. Several laboratory techniques are utilized in serology including precipitation, agglutination, electrophoresis, nephelometry, enzyme immunoassay, and fluorescent antibody methods.



**The Basic Structure of an IgM Molecule**

Lectures topics include discussion of the organs and cells of the immune system, immunoglobulin structure and function, the complement system, abnormal immune function and hypersensitivity, autoimmunity, infectious disease serology, and the principles of the various immunologic techniques used in the laboratory.

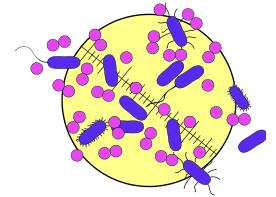
## **CLINICAL MICROBIOLOGY I & II:** (6 credits)

*Culture:* (kul'tur) [L. cultura] 1. a growth of isolated microorganisms or of living tissue cells in a special laboratory medium. 2. the propagation of microorganisms or other living cells. 3. to induce the propagation of microorganisms or living tissues cells in media conducive to their growth.

Medical microbiology encompasses the study of microorganisms causing disease in humans, including bacteria, fungi, viruses, rickettsiae, and protozoa. The identification of most microorganisms involves microscopic observation, cultural characteristics, and biochemical tests. Three basic microscopic shapes, spherical, rod-shaped, and spiral, characterize most microorganisms. Culture media supplies nutrient growth requirements, and biochemical tests rely on bacterial physiology and the end products of reactions in bacterial cells for identification.

When a patient has certain disease symptoms, the physician will often want to identify the causative agent if a microbiological infection is suspected. Positive identification of the causative agent is important in the correct treatment of the patient.

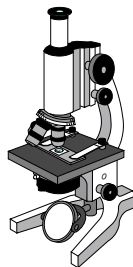
Therefore, it is imperative to have the appropriate specimens sent to the laboratory. For each source of infected material there is a certain set of tests that must be performed to discover the cause of infection. The microbiologist must be aware of the types of infective agents that may be responsible for a disease and test for these accordingly.



Microbiology lecture topics include bacterial structure, mechanisms of pathogenicity, gram-positive organisms, gram-negative organisms, anaerobes, mycobacterium, spirochetes, viruses, mycoplasma, and rickettsia. Methods used to determine the susceptibility of microorganisms to antibiotic therapy and molecular techniques are also covered.

In the laboratory, the student will become competent in culture inoculation, along with the various isolation and identification techniques for gram-positive and gram-negative organisms, mycobacterium and fungi. Also included are the processing of blood cultures, automated methods of identification, and antibiotic sensitivity testing.

**Viral Laboratory tests** will be performed to detect: CMV, HIV, Influenza, Herpes, EBV, Varicella, Measles and Mumps. Plus a viral respiratory panel to detect 22 viruses by Biofire.



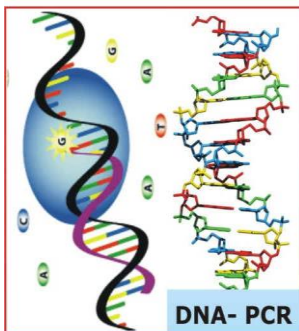
## **MOLECULAR DIAGNOSTICS** (1 credit)

*Molecular Diagnostics (mə-lĕk'yə-lər) An area of laboratory medicine in which principles and techniques of molecular biology are applied to the study of disease.*

Clinicians have discovered that molecular diagnostics has many uses beyond the creation of new screening and diagnostic tools. Expression patterns also can provide information for the design of new cancer treatments, monitor the treatment's effectiveness as it is studied in a clinical trial, and even predict the patient's response to a new treatment.

The growth and expansion of molecular technologies and automation will continue to improve patient outcomes. With the breakthroughs in molecular diagnostics and advances in laboratory equipment, this piece of the diagnostics pie is going to play an increasingly large role in early diagnosis, monitoring, and targeted pharmaceutical intervention.

Lectures topics include the structure, function, and synthesis of DNA, RNA, and involved proteins; the mechanism of inheritance; medical genetics; an introduction to molecular biology techniques, and their applications to the laboratory diagnosis of disease.



In the laboratory, the student will become proficient in the detection of MRSA – methicillin-resistant *Staphylococcus aureus* and *C. difficile* using a polymerase chain reaction (PCR) process.

Students will also perform testing for Thrombotic Risk such as Factor V Leiden polymorphism and Prothrombin mutation.

**MYCOLOGY** (included in Microbiology II course credits)

*Mycology (mi-kol'o-je) [myco- + -logy] the science and study of fungi. Microbiologically, fungi are a lower form of eukaryotes. Medically, fungi cause morbidity and mortality in various cutaneous, subcutaneous, and systemic diseases, and certain fungi are a cause of toxic food poisoning.*

Fungi include both yeasts and molds and differ significantly from bacteria. The fungi that are seen in the clinical laboratory can be separated into two groups based on the macroscopic appearance of the colonies formed. Yeast produces moist, opaque, creamy colonies, whereas molds produce fluffy, cottony, or woolly colonies. Molds are filamentous fungi. Yeasts are one-celled organisms, and molds have a basic structure that is made up of tubelike projections.

Fungi normally live a nonpathogenic existence in nature, but are well recognized as a cause of infection in humans. Humans become infected through accidental exposure by inhalation of spores, or by their introduction into tissue through trauma. Also, individuals with impaired immune systems are particularly susceptible to fungal infections.

The lecture topics in Mycology include the classification of fungi, human pathology, and laboratory methodology. In the laboratory, students will be instructed in proper techniques used to identify commonly isolated fungi.



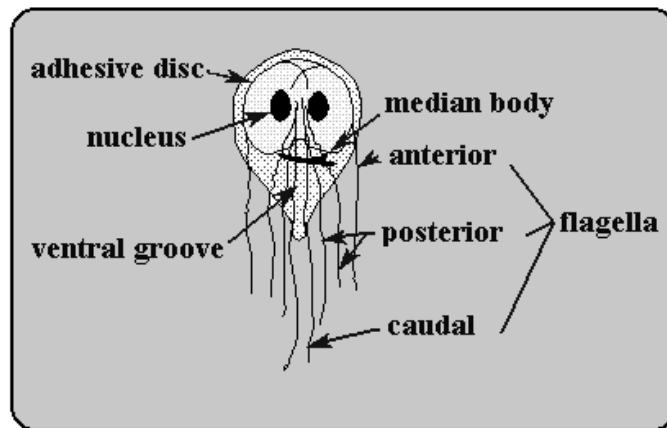
***Candida albicans***

**PARASITOLOGY** (included in Microbiology II course credits)

*Parasite (par' ah sit) [Gr. parasitos] any organism, plant or animal, that lives in or on a host that provides physical protection and nourishment. A parasite can be a single-celled or multicelled animal, bacterium, or fungus.*

Human parasitic infections occur worldwide, more commonly in tropical areas. Because of the increased amount of travel and emigration to the U.S., many organisms from other areas are being seen in this country. Another consideration is the number of immunocompromised patients who are very much at risk for certain parasitic infections.

Human parasites belong to five main groups and their identification depends on morphologic criteria. Each specimen submitted for isolation of parasites has unique morphologic criteria for the particular parasites inhabiting the area of the body from which the specimen is collected. Parasitic infections are usually diagnosed by detecting and identifying the ova (parasitic eggs), larvae (immature form) or adults of some types of helminths (worms), and the cysts (inactive stage) or trophozoites (motile forms) of protozoa.



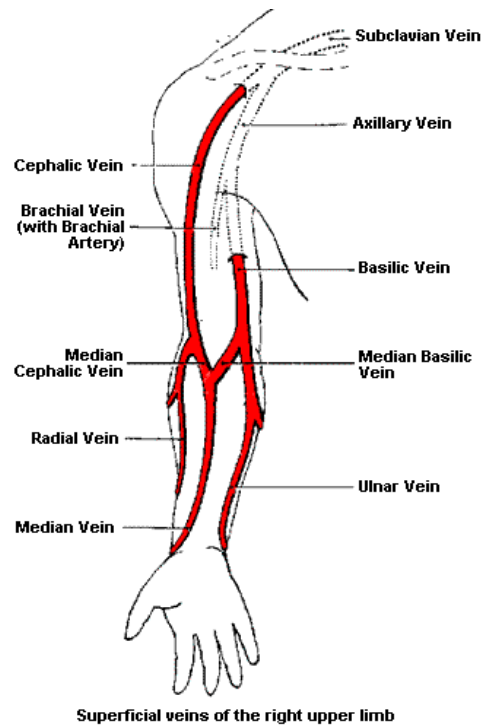
*Giardia lamblia*

Lecture topics include parasite physiology and life cycles, and transmission and symptomology of disease. Students will be instructed in the proper techniques for isolation and identification of common parasites.

## **PHLEBOTOMY** (1credit)

*Phlebotomy (fle-bot'o'me) [phlebo- + Gr. tome - a cutting] the withdrawing of blood. This procedure may be used diagnostically to obtain blood or serum specimens for laboratory analysis, and therapeutically to reduce blood volume in cor pulmonale, to reduce the number of erythrocytes in polycythemia vera, or to mobilize and deplete excessive body iron stores in hemochromatosis.*

During orientation, the techniques of venipuncture, micro-techniques, and use of equipment, Universal Precautions, safety and patient relations are discussed. Students will gain practical experience performing venipunctures during their phlebotomy rotation.



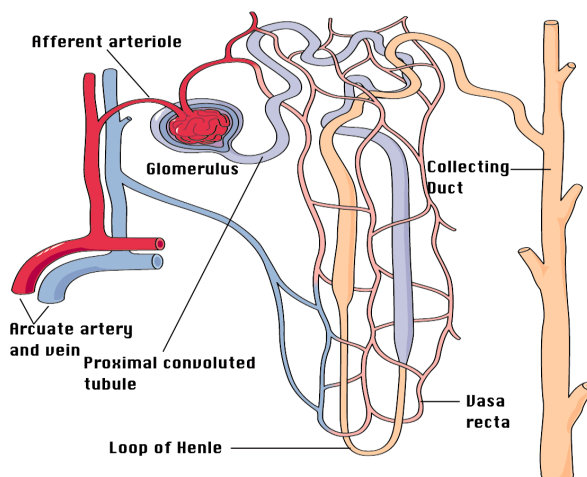
## **URINALYSIS AND BODY FLUIDS** (2 credits)

*Specific gravity (SG, sp. gr.) the ratio of the density of a substance to the density of a standard substance (usually water) at a specified temperature. The measurement of the specific gravity of urine is a standard component in routine urinalysis. It is a screening test that provides information about the concentrating and diluting ability of the renal tubule.*

In general, urine can be considered a fluid composed of waste materials of the blood. It is formed in the kidneys and excreted from the body by way of the urinary system. The kidneys regulate extracellular fluid, and since this fluid is the environment of the individual body cells, even slight changes in its composition may result in death.

Lecture topics include the anatomy and physiology of the kidney; formation and composition of urine; chemistry of the dipstick; normal and abnormal urinary sediment; and routine and special microscopy techniques. Also discussed are other body cavity fluids including synovial and cerebrospinal fluid, fecal analysis and semen analysis.

In the laboratory, the student will become practiced in both manual and automated methodology in the determination of urine and body fluid chemistry, and the microscopic analysis of urinary sediment.

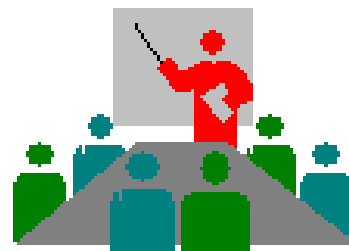


### **Microscopic Anatomy of a Renal Tubule.**

## **SPECIAL TOPICS**

### ***General Lab Principles & QA & Safety:*** (2 credits)

Topics include: Lab safety, units of measure, reagents, lab supplies, basic separation techniques, specimen considerations involving pre analytical, analytical, and post-analytical testing, Lab Math section of course includes: significant figures, metric conversions, dilutions, concentrations, statistical analysis, quality control and quality assurance.



### ***Principles in Healthcare I & II*** (3 credits)

#### ***Professionalism in HealthCare:***

Effective communication skills, team-building concepts, ethics and clinical decision-making are introduced.

#### ***Educational Methodology:***

Topics include planning instructional units, writing educational objectives, teaching methods and assessments.

#### ***Management:***

Health Care Organizational structures, processes and styles of management, job descriptions, interviewing techniques, performance appraisals, and calculating expenses and productivity. General Laboratory test procedure writing.

### ***Research Design:*** (1 credit)

This course will introduce the medical laboratory student to research terms and methods, in order to be able to read, comprehend and evaluate published studies. Additionally, the student will learn how to plan a research study and how evaluate/write a journal article.

### ***Point of Care Testing:*** (included in Chemistry course credits)

This portion of the course covers safety, instrumentation, quality control and point of care testing (*POCT*).

### ***Flow Cytometry:*** (included in Hematology course credits)

This lab-based portion of the course will introduce the medical laboratory student to flow cytometry and its applications in the healthcare setting.

### ***Capstone:*** (1 credit)

This course is the culmination of the program in which focused and relevant Capstone topics are selected to submit written papers and present selected topics.



# ***PROGRAM POLICIES***

## **ABSENTEEISM**

It is **mandatory** that students call **before 7 a.m.** if they are going to be absent due to illness. The student should **call the extension of the department to which they are assigned** and notify someone of their absence. If there is no answer in the department, call the accession area. Ask the individual in the accession area to leave written messages for both the personnel in the laboratory section to which they are assigned and the Program Director. Refer to the following list of telephone extensions for the laboratory.



### **Telephone extensions: Area code (201)**

Chemistry (Core): 447-8238

Special Procedures: 447-8367

Hematology, Coagulation and Urinalysis: 447-8351

Microbiology: 447-8306

Blood Bank: 447-8130

Accession Area: 447-8232

Program Director: 447-8234

It is the student's responsibility to fulfill lecture and laboratory objectives within the time allotted for the subject. Lecture material missed due to absence can be made up by self-study of resource material. Depending on the student's progress, laboratory work not completed must be made up at the discretion of the instructor and/or manager. If an exam is missed, a make-up exam will be given, the very next day the student returns. A total of five absences for illness will be allowed for the year. **Lost time due to excessive absenteeism (greater than five days) may be grounds for dismissal from the program.**

**All students must personally sign in upon arrival and out daily**, and a member of the staff must be apprised of the student's general whereabouts at all times. **Failure to sign in and out daily will result in dismissal from the MLS Lab Internship Program.**

Bereavement time will be granted as follows: three days for immediate family (parent, spouse, sibling, or child); one day for grandparent, mother or father-in-law.

## **ACADEMIC PROBATION**

All students are expected to achieve a final grade of 70% (minimum). This pertains to both laboratory rotations (practical) and lecture series (didactic). Approximately midway through each practical and didactic section, the instructor and/or manager will review the student's progress. If the student's performance requires improvement, the student will be advised and counseled. Confidentiality and impartiality will be maintained through the program when advisement and guidance is needed.

If at the end of either a practical or didactic section, the student fails to achieve a 70%, the student will be placed on probation. Two failures (one practical/one didactic; two practical or two didactic sections) constitute grounds for dismissal. If only one laboratory section is failed throughout the year, the student may repeat that section at the end of the program. If only one lecture series is failed throughout the year, arrangements will be made for the student to repeat the subject during the next program cycle. No makeup exams will be given; however, tutorial may be assigned.

If the student cannot pass the repeated laboratory rotation or lecture series with a 70% on the first attempt, he/she will be given an incomplete and dismissed from the program. The student's college advisor will be notified when he/she is placed on academic probation.

### **AFFECTIVE BEHAVIOR OBJECTIVES**

During the clinical experience, the student will be expected to demonstrate and be evaluated on the following professional characteristics:

- *Being prompt and attentive.*
- *Functioning within the realm of one's learning ability.*
- *Being attentive and showing interest by asking questions for clarification or to gain additional information.*
- *Checking work for errors and adhering to quality control criteria.*
- *Organizing daily assignments without constant direction.*
- *Following through on problems to the extent of his/her knowledge.*
- *Being cooperative and responding positively to constructive criticism.*
- *Maintaining a professional attitude in dealing with both instructors and peers.*
- *Not allowing distractions or disinterest to cause repetition of mistakes.*
- *Showing initiative through additional reading and/or investigation in order to enhance the educational experience.*
- *Following all ethical conduct guidelines.*
- *Patient confidentiality*

### **DRESS CODE**

All students are expected to be neat and well-groomed at all times, and abide by the following standards:

Identification badges are to be visible while on duty.

Students are to wear the designated laboratory attire, comfortable closed shoes or clean leather sneakers, and socks.

Long hair must be tied back off the shoulders while in the laboratory for your safety.

For male students, hair, beards and mustaches must be neat and trimmed.

Protective lab coats are supplied to each student at no charge. These coats are to be worn in the laboratory **only**.

\*\* *T-shirts, jeans, exercise wear, shorts, sandals (or other open shoes), boots, and canvas sneakers, are **not** acceptable.*

## **ETHICS AND CONDUCT**

The Valley Hospital Medical Lab Science Program has established the following as acceptable ethical conduct:

- *The student provides services with respect for the dignity of others, unrestricted by considerations of nationality, race, creed, color, status, or physical limitations.*
- *The student safeguards the individual's right to privacy by judiciously protecting information of a confidential nature, sharing only that information relevant to his/her care. This information is never to be discussed in the presence of the public or outside of the Hospital.*
- *The student performs all assignments, exams and lab practicals with honesty.*
- *The student demonstrates respect for self as a professional and human being by:*
  - ◆ *Not coming to the laboratory under the influence of intoxicants or narcotics;*
  - ◆ *Not bringing such items to the Hospital, nor using such items during working hours;*
  - ◆ *Not stealing or deliberately destroying Hospital property.*
- *The student's attitude shall not impede his/her progress and/or the progress of others. Negative attitudes include being uncooperative, belligerent, chronically complaining, or frequently leaving the laboratory without permission from the department Manager or Program Director.*
- *The student is willing to accept the professional, ethical, and moral responsibilities to patients, and other members of the health care team.*
- *The student maintains appropriateness of dress, cleanliness, neatness, and good grooming.*
- *The use of obscene language is degrading and will not be tolerated. Infractions of this policy will result in action by program officials.*
- *The student uses individual competence as a criterion in accepting delegated responsibilities, including all lecture and laboratory assignments.*
- *The student recognizes and accepts responsibility for individual actions and judgment.*

## **COUNSELING**

Primarily, counseling and handling of complaints are the responsibility of the Program Director. If further management of the problem is necessary, it may be referred to the Medical Director, College/University Advisor, or Employee Assistance Program.

## **DISMISSAL FROM THE PROGRAM**

The following factors constitute cause for dismissal from the Medical Lab Science Program:

**Failure to maintain an acceptable academic average:** If a student does not achieve a 70% average for two sections, this will be considered a failing performance.

**Academic Integrity Violations:** Cheating is an act of deception by which a student misrepresents his or her mastery of material on a lecture or lab written exam, or lab practical. Examples of cheating are: unauthorized assistance during exam or practical; copying from another person's exam or practical; bringing and using unauthorized materials such as notes, textbooks, preprogrammed calculators and text messaging during exam or practical; collaborating with another person during an exam by giving or receiving information without permission. If any violations occur, the exam or practical will be immediately collected and the person will be given a failing grade for the exam. The MLS Program Director, or Coordinator, of the Faculty Member will fill out a Violation of Academic Integrity Form (VAIF). The person in violation of this policy will meet with the Director or Coordinator of the MLS Program, the same day, of the occurrence, if possible. Otherwise, within 5 days of the occurrence. At this meeting, the violation will be discussed, and a determination as to whether to place the person on Academic Probation or immediately expel the MLS intern from the program will be decided.

**Unethical Conduct:** Conduct that clearly violates items listed in the "Ethics and Conduct" section of this catalog, and/or the regulations of The Valley Hospital shall constitute sufficient cause of others shall be considered as reason for dismissal from the program. Such attitude may be reflected in uncooperative, belligerent, and derisive behavior, chronic complaining, frequently leaving the laboratory without permission of the Manager or Program Director, excessive tardiness or absenteeism. Students will first be given a verbal warning; the second warning shall be a written warning; and the third notice shall be a written notice and constitute grounds for dismissal.

\*These factors constitute broad guidelines and are applied with discretion. Each situation involving the possibility of student dismissal from the program will be evaluated on an individual basis.

## **EMPLOYMENT**

Part-time positions, whereby students are employed and receive paid compensation, may be available to students. Students are eligible to work after three months (minimum), and only in a department in which they have successfully completed the laboratory rotation, or in which they have received specific training for the position. Students will not perform service work, whereby students are substituted for regular staff. Students are permitted, after demonstrating proficiency, to perform specific tasks under supervision.

## **EVALUATION SYSTEM**

Students are graded on cognitive (knowledge), psychomotor (manual dexterity), and affective (attitudinal) behaviors following each laboratory rotation. The evaluation is reviewed with the student. The final grade for a subject is computed from both the practical and didactic portions; a student must pass **both** the practical and didactic portions. The grading policy is explained in the following chart.

### **Letter Grade   Numerical   Interpretation**

<b>A</b>	<b>90-100</b>	Excellent: The student must display a comprehensive knowledge of theory and principles and demonstrate excellence in laboratory skills.
<b>B+</b> <b>B</b>	<b>88-89</b> <b>80-87</b>	Above Average: The student demonstrates good achievement in the skills and techniques in the laboratory and an understanding of the theory and principles involved.
<b>C+</b> <b>C</b>	<b>78-79</b> <b>70-77</b>	Average: The student has satisfactory skills and techniques in the laboratory and an understanding of the theory and principles involved.
<b>F</b>	<b>0-69</b>	Unsatisfactory: The student must repeat the subject because he/she does not comprehend the theory and/or failed to develop the skills and techniques required.
<b>Incomplete</b>		The required material or hours have not been completed. All work must be completed before a certificate is awarded.

## **GRIEVANCE PROCEDURE**

### **Grievance: Academic**

A student may appeal an examination score, evaluation, or course grade using the following procedures:

Within **five (5) business days** after receiving a score or grade which a student wishes to challenge, the student should schedule an appointment with the faculty member administering the grade, stating the reason for the appointment. In the conference with the faculty member, the student should be specific about parts of the examination, paper, etc. for which the evaluation is being appealed. In extenuating circumstances, e.g., where it would be difficult or impossible for the student or the faculty member to schedule an appointment within the designated time limit, the appointment should be scheduled as soon thereafter as possible. In no case, however, will an appeal be considered following **ten (10) business days** from the official date of the posting or receipt of the grade.

Should the issue fail to be resolved in the meeting with the faculty member, the student may request a conference with the Program Director. This conference should be held as soon as possible after the student's request, and will be held at such a time that the faculty member who administered the grade being challenged will be available to participate as well. The Program Director, after hearing and considering relevant information from all parties, shall render an opinion regarding the student challenge of the grade within **two (2) business days** of the conference with the student.

## **GRIEVANCE PROCEDURE (continued...)**

In the event that the student remains dissatisfied with the outcome, the student may request that the Program Director review the appeal, including the specific grade challenge made by the student, and relevant information from all involved faculty. The Program Director will render the final decision in the informal appeal process.

The informal academic appeal procedure is designed to facilitate open communication between the students and the faculty. Hopefully, the majority of student grievances will be resolved at the informal level, involving only essential parties to assist with preservation of confidentiality. Should the student remain dissatisfied with the decision of the Program Director, the student has the right to appeal in writing to the Administrative Director of the Laboratory. This appeal must be made within **five (5) business days** following the rendering of a decision by the Program Director. The written appeal must state clearly and concisely the circumstances and particulars relating to the score or grade which is being appealed.

The Administrative Director will gather all pertinent information related to the appeal, including written statements from the faculty member who administered the grade and the Program Director. The Administrative Director will appoint an Appeals Committee, to consist of the program's Medical Director, along with two neutral third parties. A meeting will then be convened to hear the evidence brought by both student and involved faculty. The student and faculty member will be notified in writing of the implementation of the formal appeal procedure and informed of the members serving on the Appeals Committee. At a time not to exceed **thirty (30) business days** from the date of the written appeal request submitted by the student to the Administrative Director, a final decision will be reached.

### **Grievance: Non-academic**

It is the policy of The Valley Hospital to not discriminate on the basis of race, national origin, religion, sex, age, veteran status, or disability. Grievances related to such forms of discrimination should follow the same procedures as listed in TVH Policy Number: 5-2, Original Date: 9/01/1977; Effective Date: 9/1/2004. A written copy of this policy will be made readily available to any student by request.

## **PROGRAM EVALUATION**

The students are given the opportunity to evaluate the program. These evaluations are confidential and anonymous. The evaluations are discussed with each manager, or those directly involved in the experience. Results of the evaluations are used to make constructive changes in the curriculum when appropriate. The students are encouraged to discuss any problems with the Program Director and the individual instructors.

Graduates are also surveyed in order to ascertain how well prepared they were for employment. Subsequently, employers are also asked to evaluate our graduates.

## **STUDENT RECORDS**

An official transcript of grades will be sent to the registrar at the college/university affiliate for those students enrolled in a "3 + 1" program. Letter and/or number grades will be recorded on the transcript depending upon the individual institution's policy.

Students may review **only** their own file with the Program Director, with the exception of interview material. Information contained within the file (grades, evaluations, etc.) will be released only upon written request of the student. Records are maintained indefinitely.

## **STUDYING**

Study time during the day may be granted by the clinical instructor; however, gaining clinical experience should always be the student's first priority. Always check with the instructor for guidance in this area.

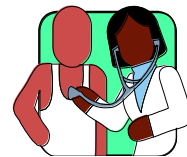


## **VOLUNTARY WITHDRAWAL FROM THE PROGRAM**

A student who wishes to withdraw from the program must write a letter of resignation to and consult with the Program Director. The student's college advisor will be notified of the student's intent to withdraw.

## **ACCIDENTS OR ILLNESS**

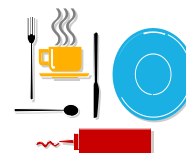
If a student has an accident while on duty, it must be reported to the department Manager or the Program Director. The student will be sent to the Emergency Department (ED) for examination or treatment, and may then be referred to their private physician. If a student becomes ill while on duty, the department Manager or Program Director must be informed. The student may be sent to Employee Health Service where the student may be advised to see their private physician; however, if warranted, the student may be sent to the ED to be seen by a physician. The student will be charged for that service by the physician, and will receive a bill from the Hospital.



In the event of an accident involving a biohazardous substance (blood or body fluids), the incident must be reported to the department manager, technologist-in-charge, or Program Director **immediately**. An "Occurrence Report" will be completed, and the student will have the appropriate treatment and blood tests drawn.

## **CAFETERIA AND LOUNGE**

One of the benefits that the Hospital offers is the use of the employee cafeteria where meals may be purchased at a reasonable cost. Meals from home may be eaten in the cafeteria, laboratory lounge, or outside during favorable weather. A food storage refrigerator is located in the lounge, and microwave ovens can be found in both the cafeteria and lounge. Everyone is encouraged to clean up after using the lounge facilities. Food may not be stored in any other refrigerator in the laboratory.



## **LOST AND FOUND**

Call the Security Department, extension 447-8290.

## **PARKING**

Students will be given parking instructions prior to commencement of the program. Parking assignments will be in areas designated for employees. Parking assignments may change during periods of construction.

## **PARTIES/SPECIAL EVENTS**

If a student is employed by the hospital, he/she will receive an invitation to the hospital's annual Holiday party. All students are invited to any laboratory-sponsored functions.



## **SAFETY RULES FOR LABORATORY PERSONNEL**



All students will be responsible for reviewing the laboratory's current safety manual and will attend an orientation session that reviews Fire and Electrical Safety, Infection Control and Hazardous Materials policies and procedures. The following are general guidelines for laboratory safety:

- *Follow Universal Precautions: treat all specimens as potentially infectious; avoid spills and minimize aerosolization.*
- *NEVER pipette anything by mouth.*
- *Dispose of sharps in leak- and puncture-proof containers.*
- *NEVER recap needles or syringes.*
- *Use protective laboratory coats, gloves, eyewear, and engineering shields.*
- *Wash hands frequently following all laboratory activities, after removing gloves, and immediately following contact with potentially infectious material.*
- *Decontaminate work surfaces and wipe up spills immediately.*
- *NEVER eat, drink, smoke, store food, or apply cosmetics in the laboratory.*

## **SECURITY**

The following information concerns the United States Department of Education's directive concerning a student's right to know:

*The Valley Hospital maintains a security desk in the Bergen Wing of the main building. All complaints and/or investigations originate from this desk. If security assistance is needed for any reason, dial extension 8290. A security officer will be dispatched via two-way radio communication.*

*The hospital maintains a visitor pass and employee identification system. A closed circuit TV system is used for surveillance throughout the facility. The grounds are patrolled by security on foot patrol and by vehicle. Escort service is available for anyone needing assistance to his or her vehicles by calling the main security desk at extension 8290. There are no students in residence on the campus.*

*The Hospital security program is outlined in the Personnel Policies and Procedures Manual. Everyone is encouraged to report any security problems of which they are aware to the Security Department.*

*The Valley Hospital conducts continuing education that stresses procedures designed to help provide a safe and secure environment.*

*Statistics on criminal offenses committed on campus and arrests for offenses are available. Students may inquire about these statistics upon entering a program at The Valley Hospital.*

## **SNOW POLICY**



The Hospital administration may declare a "snow emergency." If such an emergency is declared, The William O. Green Jr. M.D., School of Medical Laboratory Science, will be closed. All Medical Laboratory Science Interns will be granted an excused absence. During inclement weather, the student should use discretion in traveling and he/she is urged to call the laboratory for advisement, or discuss the situation with the Program Director. Under all circumstances, the student must call the laboratory if he/she will be absent.

## **TELEPHONE ETIQUETTE**

When answering the telephone, be sure to answer courteously with your name and the section of the laboratory.

*Example: Good Morning; Microbiology; Anne Jones speaking. How may I help you?*

Public telephones are located throughout the hospital for personal calls. Incoming calls for students will be routed to the section of the laboratory in which the student is assigned.

## **TRAVELING TO VALLEY HOSPITAL**

The Valley Hospital is located in Bergen County, in the residential community of Ridgewood, NJ. The hospital can be accessed: (1) from the south (George Washington Bridge, Passaic or Essex Counties, Route 80, or Route 4) by traveling north on Route 17 to the "Linwood Avenue-West" exit; stay on Linwood Avenue, which will cross over Route 17, and travel to the third traffic light. The hospital is located on the corner of Linwood and North Van Dien Avenues, (2) from the south by traveling north on the New Jersey Garden State Parkway to exit 163 for "Route 17 North" (see above directions for continued directions to the hospital), (3) from the north (New York State, Tappan Zee Bridge) follow directions to the Garden State Parkway (south) to exit 166, and stay right onto Highland Avenue; travel a short distance to Linwood Avenue and make a left turn. Travel on Linwood Avenue, over Route 17, to the third traffic light.

***Program Director***

**Marietta Tomlin, MS, MLS(ASCP)<sup>CM</sup>, SM(ASCP)**

*The Program Director oversees the coordination of all student-related activities, including the planning and development of the curriculum, and provides leadership and guidance to the students.*

***Clinical Educator***

**Carolina Vilchez, MS, MLS(ASCP)<sup>CM</sup>, H(ASCP)**

***Principal Adjunct Faculty***

Doreen Atlak, MT(ASCP)

Jorge Castellanos, MLS(ASCP)

Cristina Hernandez, MT(ASCP)

Azbije Ibraimi, MLS(ASCP)<sup>CM</sup>

Yohania Kedl, MT(ASCP)

Valerie Lampman, MLS(ASCP)<sup>CM</sup>

Rashmika Patel, MLS(ASCP)<sup>CM</sup>

Madhuri Ramanathan, PhD, SMB(ASCP)

Valeria Siguenza, MLS(ASCP)<sup>CM</sup>

Michele Wallace, MT(ASCP)

Jeanette Witkowski, MLS(ASCP)<sup>CM</sup>