

**ESSENTIAL FUNCTIONS**

Essential functions represent the non-academic requirements of the Medical Technology Program at UC Irvine Medical Center. The demonstrated ability to perform these functions is necessary for the successful completion of training and achievement of entry-level competency. ***Applicants will be requested to sign a statement that they have read the information provided about essential functions and that they understand their requirements.*** Some of the functions required of our students and graduates are set forth in the following sections.

<b>GENERAL</b>	
<b>Tasks that a student is expected to successfully perform at the laboratory bench in each different area of the laboratory. In general, one would expect a technologist or student to:</b>	
1. Follow a written protocol, produce an accurate result, and notice and confirm any unusual findings.	2. Follow quality control protocol and follow through with problem situations by notifying the instructor and working out the problem.
3. Perform all work in the laboratory following all established safety guidelines.	4. Organize, prioritize and efficiently complete the assigned work.
5. Adapt readily to changes in the work environment.	6. Communicate effectively, via the telephone or in person, with instructors, laboratory staff, hospital staff and patients
<b>Certain psychomotor skills are required to achieve an acceptable level of performance. Some examples of these skills are:</b>	
1. Ability to read procedures, thermometers, instrument indicators and read-outs, and computer video terminals.	2. Ability to distinguish variations in color and shape both macroscopically and microscopically.
3. Ability to hear and respond to instrument alarms and beeps.	4. Capability of carrying supplies to the work bench or storage areas.
5. Ability to reach instruments at varying heights or reach behind/under instruments, printers, etc.	6. Ability to perform a number of manual functions such as pipeting, using a computer keyboard, handling test tubes, media plates or tools.

<b>PHLEBOTOMY</b>	
<b>Examples of essential functions expected in Phlebotomy would include:</b>	
1. Mastery of proper specimen collection in inpatient and outpatient environments, which includes patient preparation and the labeling, handling, processing, transportation and storage of specimens.	2. Mastery of skills required for collection of blood specimens by using various techniques, such as syringes, evacuated tubes and butterflies, on patients of varying age and physical condition.

<b>BLOOD BANK</b>	
<b>Examples of essential functions expected in Blood Bank would include:</b>	
1. Demonstration of the ability to perform the standard Blood Bank procedures including answering phones, issuing and ordering blood and components, processing and preparing blood components, and inventory of blood components.	2. Performing the required technical skills including pipeting, making cell suspensions, centrifuging, washing cells and making eluates.
3. Demonstrating proper operation of the instruments utilized in the performance of these procedures, and performing appropriate quality control measures.	4. Demonstration of the ability to work in the Donor Center in areas such as obtaining donor histories, phlebotomy and component preparation.

<b>CHEMISTRY</b>	
<b>Examples of essential functions in Chemistry would include:</b>	
1. Demonstration of the ability to perform the procedures in the Chemistry sections with proper use of the instruments in those areas. Required technical skills may include pipeting, preparation of dilutions and reagents, calibration techniques, sample loading and touch screen sample programming.	2. Performing preventive maintenance, calibration and troubleshooting procedures, as well as the incorporation of quality control measures, for each procedure and related instrument. System maintenance would include replacement and cleaning of such components as sample and reagent supply, incubators and photometers.
3. Demonstration of the ability to perform procedures in Special Chemistry and Toxicology including operation of instruments such as: a spectrophotometer, nephelometer, electrophoresis equipment, densitometer, gas chromatograph (GC), atomic absorption spectrophotometer (AA), high performance liquid chromatograph (HPLC) and various immunochemistry analyzers. These instruments have very diverse operational and technical requirements. Procedures may involve the quantitation of analytes at the nanogram level.	4. Demonstration of the ability to perform procedures in Urinalysis and Automated Chemistry including the use of a refractometer, centrifuge, microscope, osmometer, automated urinalysis system, and a variety of automated chemistry analyzers.

<b>HEMATOLOGY</b>	
<b>Examples of essential functions in Hematology would include:</b>	
1. Demonstration of the ability to perform the procedures in the Hematology lab with the proper use of the instruments in this section such as automated hematology analyzers, automated coagulation analyzers, slide stainer and spectrophotometer.	2. Performing the necessary preventive maintenance, calibration and troubleshooting procedures for each procedure and the related instrument.
3. Performing required technical skills including centrifugation, preparation of reagents and controls, pipeting, preparation of dilutions, manual counting methods and preparation of peripheral blood, bone marrow and body fluid smears.	4. Identifying both normal and abnormal cells on bone marrow, blood and body fluid smears, and differentiate cells according to stage of development and cellular morphology with the utilization of microscopy and various staining techniques. Performance of immunofluorescent procedures requires fluorescent microscopy skills.

<b>MICROBIOLOGY</b>	
<b>Examples of essential functions in Microbiology would include:</b>	
1. Demonstration of the ability to perform the various procedures in bacteriology, mycology, mycobacteriology, parasitology, immunoserology and virology. Students must demonstrate the ability to work with the instrumentation, equipment and/or materials associated with the different procedures including various types of incubators, anaerobic jars, culture media, centrifuges, automated instrumentation, molecular technology, fluorescent microscopes and standard light microscopes.	2. Demonstration of the ability to perform immunoserological procedures which include indirect hemagglutination (IHA), neutralization, latex agglutination, complement fixation, immunodiffusion, latex particle agglutination (LPA), enzyme immunoassay (EIA), indirect fluorescent assay (IFA) and counterimmunoelectrophoresis assay. Students must also demonstrate the ability to observe and interpret final readings for these procedures.
3. Processing specimens in each area of Microbiology by centrifugation, inoculation of media, and staining of smears.	4. Performing testing procedures involving pipeting, diluting and preparing of reagents while incorporating the appropriate quality control measures.
5. Identifying different organisms through the examination of stained smears, culture growth characteristics, biochemical reactions and immunoserological typing of organisms.	6. Performing various antimicrobial susceptibility test procedures and demonstrating the ability to interpret test results.

**ESSENTIAL FUNCTIONS**

To insure that you, as an applicant, understand the physical and behavioral requirements of our program, we request that you sign this form attesting to the facts that:

1. You have read the description of these essential functions
2. You have an understanding of these requirements
3. You believe that you can meet these standards



I have read the description of the essential functions of the UCI Medical Center Medical Technology Training Program, understand what these requirements are, and believe that I can meet these standards.

Printed name \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

**PLEASE RETURN THIS SIGNED FORM WITH YOUR APPLICATION TO:**

Medical Technology Program  
UC Irvine Medical Center  
101 The City Drive  
Bldg. 54, Room 4700  
Orange, CA 92868