



**WELCOME TO OUR DEPARTMENT**



# Presentation Includes:

- 1. Where does the Medical Laboratory Technician Work ?**
- 2. Why you should become a Med. Lab. Tech.**
- 3. Overview of Core Courses you will be taking to become a Med. Lab. Tech.**
- 4. The Phlebotomy Program**

 **Enjoy the show !** 

## **Where does the Laboratory Technician Work ?**

**In Hospital Laboratories**

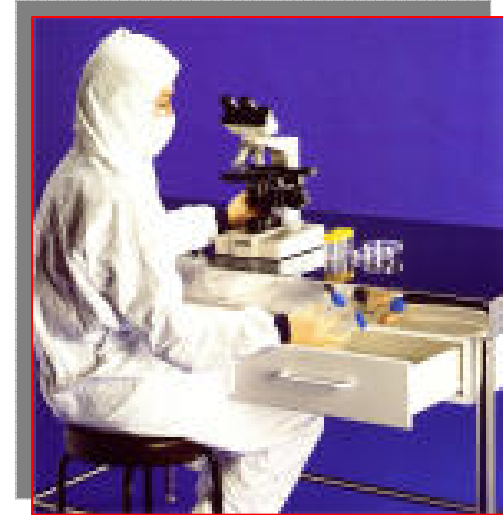
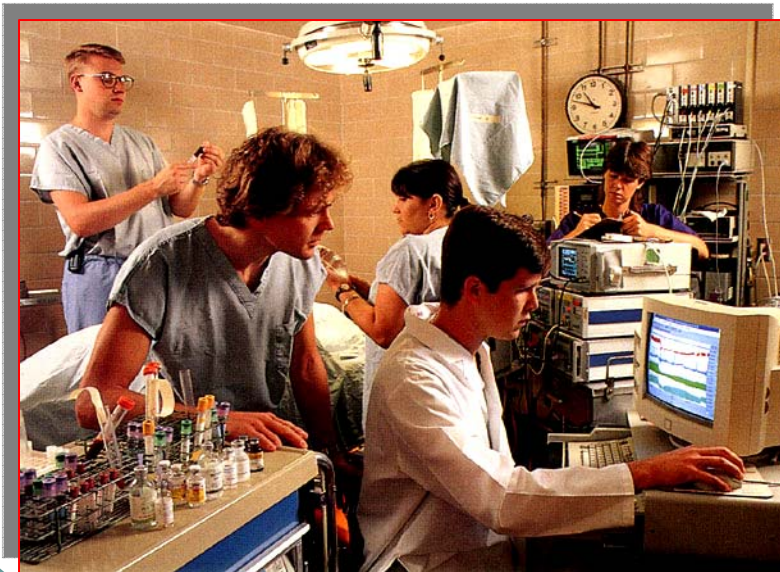


**In Physician's Offices**



## **Where does the Laboratory Technician Work ?**

### **In Industrial Laboratories**



### **In Research Laboratories**

## **Where does the Laboratory Technician Work ?**

**In Fertility Clinics**



**And even in Veterinary Labs.....**





## Why become a Med. Lab. Tech. ?

- \* Rated as the # 18 best job by the *"Jobs Rated Almanac"* for job growth, employment and job security.
- \* Work in high tech environments.
- \* Med. Lab Techs. are in strong demand.



## **Why become a Med. Lab. Tech. ?**

- \* Get a diverse training background that can lead to a variety of employment settings and upward career mobility.**
- \* Be a part of the team of health care professionals that investigate disease processes.**



# Overview of Core Courses

## First Semester

Fundamentals of Physiology I

Serology

Introduction to Laboratory Sciences





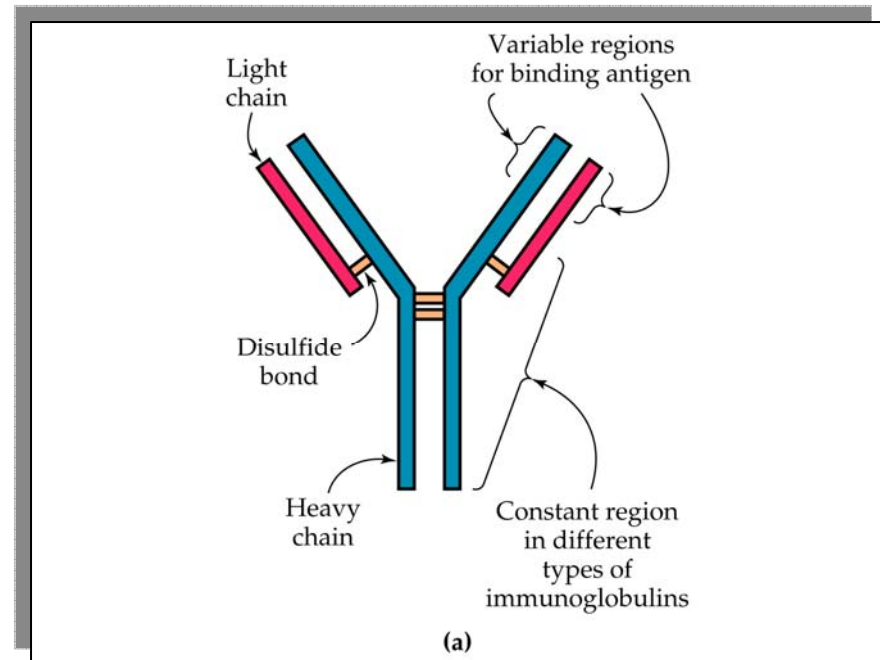
## **Fundamentals of Medical Physiology I**

**Overview of the ten  
systems of the human  
body in health and disease  
with emphasis on  
cardiovascular and  
respiratory physiology of  
the human.**



## Serology/Immunology

The immune system; its components and their functions. Antigen-antibody reactions, cell mediated immunity, the complement system and pathological conditions are discussed.



Immunoglobulin

## **Introduction to Laboratory Science**

**A survey of the career and employment opportunities that utilize laboratory skills. Hands on experience with major instrumentation employed in laboratories with emphasis on clinical, hospital, and research labs.**



# Overview of Core Courses

## Second Semester

Fundamentals of Physiology II

Hematology



## **Fundamentals of Medical Physiology II**

**Examination of function of  
selected organs in health and  
disease.**

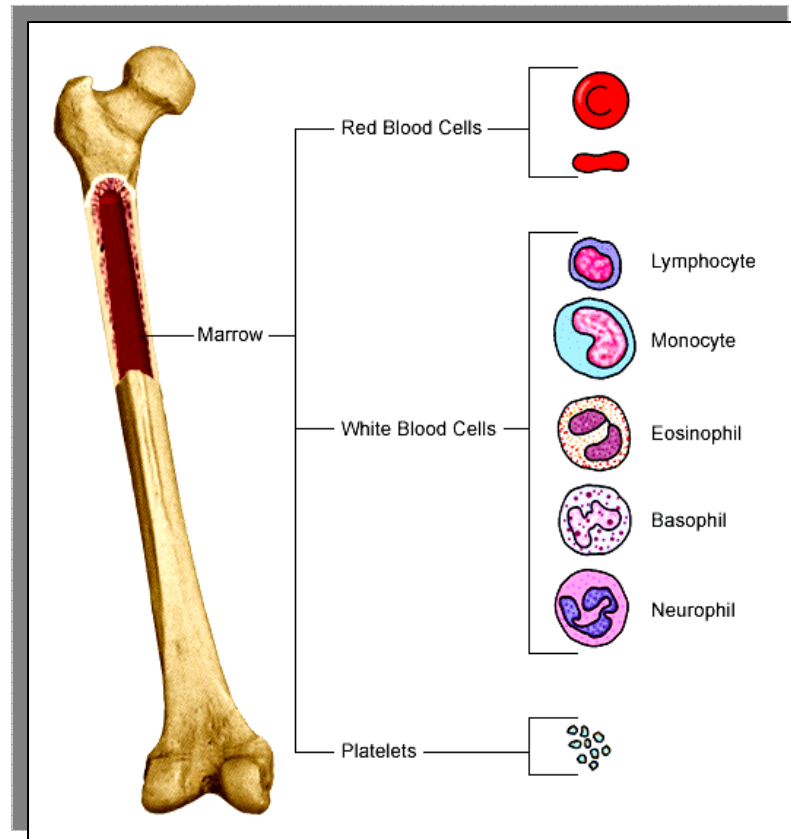
**In-depth studies of renal,  
gastrointestinal and  
endocrine physiology of  
the human.**





# Hematology

Topics include cell formation, function, pathological states both physiological and genetic hemoglobinopathies, coagulation theory and factors.



# Overview of Core Courses

## Third Semester

Immunohematology/Blood Banking  
Survey of Laboratory Instrumentation  
Clinical Chemistry I  
General Microbiology  
Clinical Training I



## **Immuno hematology (Blood Banking)**

**Detailed study of basic concepts of inheritance with respect to human blood factors. Blood bank procedures such as typing, immune antibody screening and identification are performed.**



## **Survey of Laboratory Instrumentation**

**The basic principles  
and theories of  
laboratory  
instruments will be  
discussed.**



## **Clinical Chemistry I**

**Study of the methods of assay of body fluids. Lecture stresses the analytical physiological basis of human metabolites in health and disease.**

**Laboratory emphasizes analytical methodologies, basic instrumentation and quality control.**





## **General Microbiology**

**Classification, nomenclature and identification of micro organisms. The physiology of micro-organisms, pathogenic organisms and organisms of economic importance are considered.**

**Industrial microbiology and bacteriology are included.**



## **Clinical Training I**

**Under the supervision of clinical proctors, students practice the medical laboratory techniques they are developing.**



# Overview of Core Courses

## Fourth Semester

Instrumentation in the Clinical Lab.  
Clinical Chemistry II  
Clinical Microbiology  
Histology  
Clinical Training II



## **Instrumentation in the Clinical Laboratory**

**Gives student a broad-based understanding of clinical instrumentation principles, specific applications of these principles, and the process of instrumentation selection.**



## **Clinical Chemistry II**

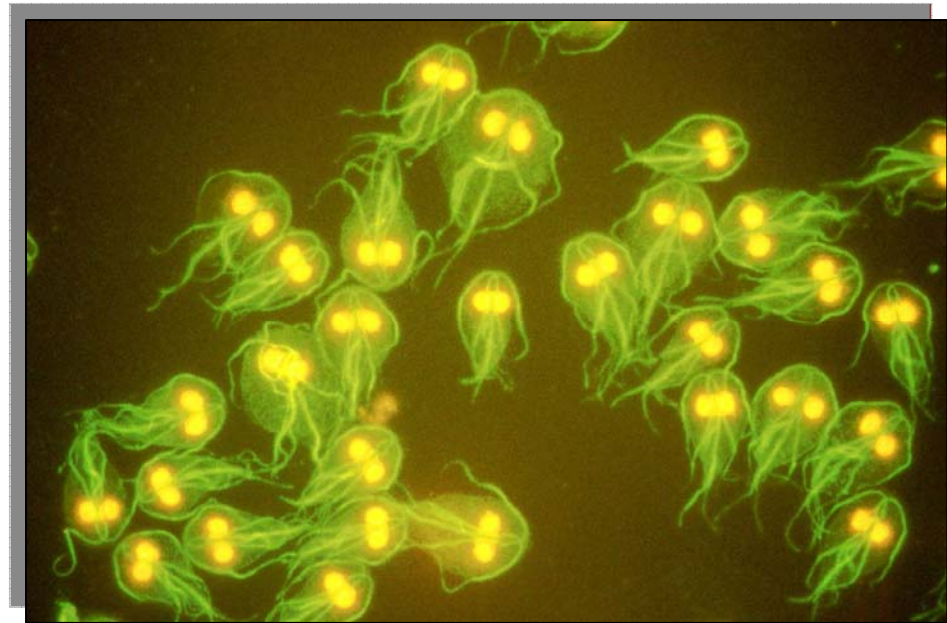
**Continued study of the composition and methods of assay of body fluids. Lipids, enzyme kinetics, liver function tests, renal function, cardiac assessment, hormone levels and toxicology are discussed in lecture and performed in laboratory.**





## **Clinical Microbiology**

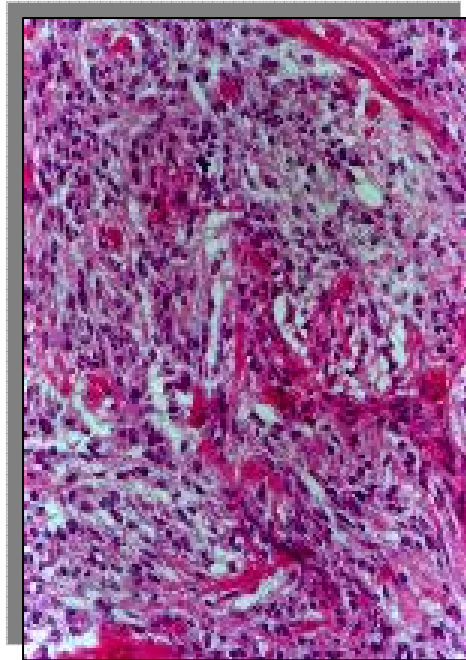
**The identification and quantification of pathologic and non pathologic organisms encountered in human specimens. Treatment and handling of specimens are discussed. Mycology and parasitology included.**



*Giardia lamblia*

## Histology

The microscopic study of vertebrate cells, tissues and organs, stressing the relationship of structure and function. Laboratory work includes the preparation of stained slides for light microscopic study.



Microtome

## **Clinical Training II**

**Continuation of clinical experience. Under the supervision of clinical proctors, students gain additional experience in developing technical skills.**



# Phlebotomy



**Training in drawing and handling blood samples for laboratory testing in hospitals, doctor's offices, and large service laboratories. Emphasis on approved methods and safety, medical terminology, anatomy, and laboratory procedures.**





**We hope you enjoyed this presentation.  
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We'll be glad to show you our facilities.**

PowerPoint Presentation created by Kirsten Gabrielsen  
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**THANK YOU**