Choose a Career in *Medical Laboratory Science*!

Sponsored by the Medical Laboratory Science Program at West Liberty University
West Liberty, WV., 26074
304-336-8177
Campbell Hall houses the West Liberty University Medical Laboratory Science Program
Did you know.....?

• It is estimated that 70 - 80% of all physician decisions are based on laboratory tests performed by the Medical Laboratory Scientist (MLS). In fact, two-thirds of a patient’s medical records are laboratory tests.

• There is currently a shortage of the MLS in the U.S. The American Society of Clinical Pathologists Board of Registry found vacancy rates for the MLS at between 7-20% depending on the job type and location. (Laboratory Medicine, 2001, 32:124-137)
National Shortages

Currently there is a national shortage of properly trained medical laboratory personnel.

There are many opportunities in this exciting and fulfilling career.
TWO NEW DEVICES HELP PATIENTS TRACK GLUCOSE TRENDS

On June 12, the FDA announced that it has cleared for marketing two glucose test meters used with personal digital assistants (PDAs). The devices will allow people with diabetes to more easily track and manage their blood sugar levels through the use of hand-held computer technology.

The products are the FreeStyle Tracker Diabetes Management System, made by TheraSense, Inc., (Alameda, Calif.) and the Accu-Check Advantage Module, made by Roche Diagnostics Corp., (Indianapolis, Ind.). The devices, which have two components with associated software, integrate parts of each company's currently marketed glucose meters and test strips with a Handspring (Mountain View, Calif.) Visor PDA.

Why There's a Shortage Of Clinical Lab Scientists

Lab Coalition, Hospitals Struggle to Find Viable Solutions

BY SUE AUXTER

It will come as no surprise to most labarators that there's been a steady increase in job vacancy rates over the last 12 years. According to data collected by the American Society for Clinical Pathology's (ASCP) Board of Registry (Lab Med 2000; 32:124–38), vacancy rates for clinical laboratory scientists in the U.S. are now between 7% and 20%, depending on job type and geographic location. To make matters worse, clinical laboratory science programs continue to close, meaning that there are fewer programs available to educate tomorrow's clinical laboratory scientists.

"This is an immense problem. We are currently graduating fewer than half of what the U.S. Bureau of Labor Statistics says is the annual delta for new employees. It's about 9,800, and we are graduating only about 4,100 people per year," said James Griffith, Convener of the Coordinating Council on the Clinical Laboratory Workforce (CCCLW), a council of twenty laboratory organizations and four government agencies that is examining the lab workforce shortage issue in an attempt to find some solutions.
2000 Wage and Vacancy Survey of Medical Laboratories
Wages on the Upswing, Vacancy Rates Accelerate

Kory Ward-Cook, PhD, MT(ASCP),¹ and Suzanne Tannar²

From the ¹ASCP Board of Registry, Chicago, IL, and ²Morpace International, Detroit, MI
Laboratory Medicine 2001, volume 32, number 3
Summary and Conclusions

“Overall, the wages for all medical laboratory positions are on the upswing. The percentage median wage increases are collectively greater than in any other time in the 12-year comparison period. Vacancy rates are concurrently continuing to accelerate for 8 of the 10 positions. Difficulty in filling shifts, coupled with more staff turnover, presents a challenge for laboratory directors and managers.”
Bureau of Labor Statistics

- 53,000 new jobs
- 40,000 vacancies
- 93,000 positions to be filled
- 9,000 openings per year
- 4,990 graduates/year

Clinical Laboratory Scientist
Listen! Would you like to know…

How you can help *doctors* diagnose and treat disease?

How you can have an exciting and rewarding career helping others?

How you can join a growing field with flexibility and job security?
A career in the medical laboratory is your answer!
Medical Laboratory Science is a dynamic, exciting profession that continually changes as new medical knowledge and medical technologies are discovered.
Let’s Talk….

Positions are now available in the medical laboratory !!

*Education, preparation and training:*  
a look at a typical medical laboratory  
Career path and options.
The Medical Laboratory Scientist (MLS)...

- Also known as a Medical Technologist …
- Needs a *Four* year Bachelor of Science Degree.
- Works in all areas of the medical laboratory:
  - Microbiology
  - Blood banking and transfusion medicine
  - Clinical chemistry
  - Hematology
  - Molecular diagnostics
- Uses microscopes, electronic/robotic equipment and instruments, and computers.
- Must provide accurate and reliable results to doctors.
Why Choose to Become a Medical Laboratory Scientist …?

• Laboratory tests are extremely valuable
• Contribute up to 80% of all medical decisions made by doctors
• Modern medicine could not function without laboratory test results.
• Demand for laboratory professionals has exceeded the supply to date nationally !!!!!!
Education, Training, Preparation

High School: Solid skills in Math and Sciences; successful

College: completion of *Basic Health Science* courses in chemistry, biology, computer Science, & math. (A,B, and + grades may be acceptable)

West Liberty’s MLS program: Combo of classes and clinical training.
- 2 years general studies and science courses,
- 2 years in the MLS program
- Senior year includes a 16 week internship in an actual hospital laboratory!
Education, Training, Preparation cont...

NAACLS accredited program (National Accrediting Agency for Clinical Laboratory Science, 8410 West Bryn Mawr Ave., Suite 670, Chicago, IL, 773-714-8880)

Guidance Counselor or local hospital laboratory can provide more info or email us at:

Dr. William Wagener, Ph.D., MT(ASCP), Professor and Program Director, Medical Laboratory Science Program
wagenerw@westliberty.edu
“Real life” training directly prepares you for the job.

National Certification Exam is available though the American Society of Clinical Pathologists (ASCP) Board of Certification (BOC)

You are permitted to use these initials after your name:  MLS(BOC)

State Licensure may be required
Masters Degree in Specialties

Many graduates continue on to graduate or professional (medical, dental, physician assistant) schools
Do You Have What it Takes?

Problem solvers

Enjoy challenge and high levels of responsibility
*Enjoy working in laboratories*

Focus on accuracy and reliability

Perform many tasks at the same time

High standards and demand quality

*Commitment to help others*
Typical Open Laboratory Configuration
Organization of the Medical Laboratory

*Typical (Discipline-Specific)*

- Microbiology
- Blood Banking & Transfusion Medicine
- Clinical Chemistry
- Hematology/Coagulation
- Immunology
- Urinalysis
- Molecular diagnostics and Esoteric Testing
MICROBIOLOGY is:
Bacteriology, mycology,
parasitology, virology
Bacteriology
Parasitology
Mycology
Clinical Chemistry
Hematology
Blood Bank
Molecular Diagnostics
West Liberty University Medical Laboratory Science

Nationally Accredited

Hands-On
Freshman Year

General Studies
Introductory Science Courses
General studies Courses
Sophomore Year

General Studies
Microbiology
Anatomy and physiology
Intro. to Medical Lab Science
Junior Year*

Clinical Chemistry
Immunology
Blood Bank
Body Fluids

Hematology
Clinical Microbiology

*Student Labs in most areas
Senior Year

Senior level courses

Clinical Rotations

Preparation for National Certifying Exams
Where you will work…..

Hospitals Laboratories
Physician Office Laboratories
Independent or Reference Laboratories
Public Health Laboratories
Pharmaceutical Companies
Fertility Clinics
Veterinary Laboratory
and others
Career Options...

Educational Program Director and/or teaching
Research/ Clinical Trials
Product Development
Medical laboratory Sales and Marketing/Consulting
Medical company technical representatives
Genetics
Laboratory Information Technology
Multi-departmental Manager/Hospital laboratory Administration
Medical Informatics & computers
Basic Working Career Levels….

Clinical Departments: Hematology, Chemistry Blood Bank, Microbiology, Immunology

“Bench” testing

Supervisor

Manager
A great Career...

Perfect Blend of Science, Medicine and Technology

Reasoning and Technical Skills

Interesting, Life Long Learning

Allows for branching into other fields

and......
...... a challenging, rewarding, way to help people.
Finally...

Though we are behind the scenes....
We are the Heroes of the Health Care Team
Solving Today’s Medical Mysteries.
If you are interested about learning more about the Medical Laboratory Science program at West Liberty University please call us at 304-336-8177 or 8174

Or you may email the Program Director at: wagenerw@westliberty.edu