

# DACUM Competency Profile for Medical Laboratory Technician

## **DACUM Panel Members**

Kathleen Tucker

Clinical Laboratory Scientist (CLS)

Carmel Valley, CA

Jane Vargas

Laboratory Director

Monterey, CA

Jane Finney

Laboratory Manager/Quality Manager

Salinas, CA

Linda Hoops

Laboratory Manager

Salinas, CA

RoseAnne Thomas

Senior Clinical Laboratory Scientist (CLS)

Monterey, CA

Liz Brenner

Chief Technologist

Watsonville, CA

Linda Delcambre

Senior Clinical Laboratory Scientist (CLS)

Pacific Grove, CA

Peggy Feicht

Clinical Laboratory Scientist (CLS)

Carmel Valley, CA

## **DACUM Facilitator**

Joanne Gray, R.N., M.S.N.

Regional Health Occupations Resource Center

## **Project Director**

Colly Tettelbach

Hartnell College

Salinas, CA

## **Project Manager**

Linda Sullivan

Industry-Driven Regional Collaborative

Hartnell College

Salinas, CA

## **Produced By**

**Regional Health Occupations Resource Center**

**Hartnell College**

156 Homestead Avenue

Salinas, CA 93901

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The medical Laboratory Technician is a member of the health care team who provides clinical information for disease prevention, medical diagnosis, and treatment of the patient by processing specimens and performing laboratory tests.

<b>Duties</b>		<b>Tasks</b>			
<b>A</b>	Maintain Safe Environment	A-1 Wash hands	A-2 Use personal Protective Equipment	A-3 Maintain Clean Room Environment	A-4 Dispose of hazardous and medical waste
		A-5 Adhere to standard precautions	A-6 Participate in agency safety education		
<b>B</b>	Perform General Lab Duties	B-1 Disinfect Work Area	B-2 Read communication logs	B-3 Review outstanding procedures report	B-4 Take temp. of general lab equipment & environment
		B-5 Organize and prioritize workload	B-6 Rotate/Discard specimens	B-7 Prepare testing materials for work stations	B-8 Manage lab inventory
<b>C</b>	Maintain Testing Equipment	C-1 Review maintenance log/checklist	C-2 Check reagents and supplies	C-3 Calibrate instrument as necessary	C-4 Perform electronic and mechanical check
		C-5 Clean instrument/check waste	C-6 Change parts as required	C-7 Ready the instrument per specifications	C-8 Troubleshoot equipment as necessary
		C-9 Document maintenance performed			
<b>D</b>	Perform Quality Control Testing	D-1 Check lot numbers of Q.C. materials	D-2 Reconstitute control materials	D-3 Run quality control sample	D-4 Analyze quality control data
		D-5 Perform corrective action if necessary	D-6 Document quality control results		
<b>E</b>	Perform Pre-Analytical Procedures	E-1 Review physician's order	E-2 Collect appropriate specimen from properly identified patient	E-3 Verify specimen label/patient ID and document receipt	E-4 Prepare specimen for appropriate test
		E-5 Assess specimen for integrity	E-6 Route specimen to appropriate work area	E-7 Create work sheets if necessary	

**F**

Perform Analytical Test Procedures

F-1 Load Automated equipment	F-2 Perform volumetric measuring	F-3 Perform chemistry/special chemistry testing	F-4 Perform body fluids testing
F-5 Perform hematology/coagulation testing	F-6 Perform urinalysis testing	F-7 Perform microbiology testing	F-8 Perform serology/immunology testing
F-9 Perform immuno-hematology testing	F-10 Perform point of care testing	F-11 Perform proficiency test	F-12 Perform miscellaneous procedures

**G**

Perform Post-Analytical Test Procedures

G-1 Refer test results to clinical lab scientist when needed	G-2 Perform additional testing as directed	G-3 Release lab results as directed	G-4 Distribute final lab report
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**H**

Maintain Professional Responsibilities

H-1 Maintain licensure	H-2 Participate in continuing education	H-3 Maintain personal hygiene and professional appearance	H-4 Participate in agency performance improvement programs
H-5 Perform within legal and ethical boundaries	H-6 Provide patient education	H-7 Practice principles of client services	H-8 Participate in professional organizations

## **FUTURE TRENDS**

- Voice activated transcription

## **Future Trends and Concerns**

- Ambulatory patient groups
- Billing compliance/fines/modifiers
- Changes in staffing pattern
- Changing networking technology
- Critical pathways
- Financial cutbacks
- Focus on wellness/preventive medicine
- Increase in language barriers
- Increased competition
- Increased costs
- Increased liability
- Increased patient awareness
- Increased regulatory requirements
- Increased responsibilities
- Increased technology
- Job role changes
- Lifelong Learning
- Managed care
- Mergers/buy-outs
- More paperwork
- National competitive bidding for lab services
- Point of care demands
- Self-directed work teams
- Shift towards ambulatory/Home care
- Shorter turnaround time expectation

## **Knowledge and Skills**

- Age Awareness
- Agency Policies & Procedures
- Anatomy/Physiology
- Aseptic Technique
- Body fluids
- Body Mechanics
- Chemistry
- Clinical Significance
- Coagulation
- Computer skills
- Cost awareness
- Cultural Awareness
- English
- Ethics
- Following Procedures
- Hazardous Materials
- Hematology
- Immunohematology
- Immunology
- Instrumentation troubleshooting
- Literacy
- Manual Dexterity
- Math
- Medical Terminology
- Microbiology
- Organizational skills
- Penmanship

- Phlebotomy
- Pipetting
- Quality Assurance
- Quality Control
- Reference Ranges
- Safety (Fire, Electrical, Environmental)
- Scope of practice/state regulations
- Specimen Collection
- Specimen Processing Requirements
- Standard Precautions
- Standing for long periods of time
- Supply Management
- Urinalysis

## **Tools, Equipment, Supplies and Materials**

- Agglutination viewer
- Alcohol pads
- Anaerobe jars
- Anaerobe packets
- Analytical balance
- Autoclave
- Autoclave tape
- Batteries
- Beakers
- Betadine
- Biohazard garbage bags
- Biohazard mats
- Bleach/disinfectant
- Blood Bank arm bands
- Blood Bank Bag
- Blood Bank Sealer
- Blood culture bottle
- Blood culture incubator
- Bunsen Burner
- Calculator
- Candle jars
- Cell washer
- Centrifuge
- Centrifuge tubes
- Chemistry Analyzers
- Communication labels
- Computer
- Copy machines
- Copy paper
- Cover slips
- DI water (Millipore)
- Diamond pen
- Diff safe
- Erlenmeyer Flasks
- Eye wash
- Fax machine
- File cabinets/Folders
- Filter paper
- Fire blanket
- Fire extinguisher
- Flammable storage container
- Flashlights
- Freezers

- Fume hood
- Gauze
- Glove liners
- Gloves
- Graduated cylinders
- Hand cream
- Heat block
- Hemacytometer
- Hematology analyzers
- Hemostats
- Immersion Oil
- Incubators
- Inoculating needles
- Instrument cassettes
- Kim wipes
- Lab manuals
- Lab coats
- Label printer
- Lens cleaner
- Methanol
- Microbiology Instrumentation
- Microhematocrit
- Micrometer
- Microscope light bulbs
- Microscopes
- Needle holders
- Needles
- Paper towels
- Parafilm
- Pencils
- Pens
- Pipettes (glass, plastic, volumetric)
- Petri dishes/media
- Phone lists
- Pipette bulbs
- Plasma extractor
- Plasma Thawer
- Platelet rocker
- Point of care instruments
- Printer
- Reagents
- Reference books
- Refractometer
- Refrigerator
- Rockers
- Rotator controls
- Safety glasses
- Safety shield
- Sample cups
- Scissors
- Sealant for tubes
- Sed Rate tubes and rack
- Sensitivity plates & discs
- Sharps containers
- Shower
- Slide box
- Slides
- Soap
- Special Chemistry Analyzer

**Tools, Equipment, Supplies and Materials**

- Specimen container
- Specimen tubes (culture tubes)
- Spectrophotometer
- Squeeze bottles
- Stainer
- Stop watch
- Stylet
- Syringes
- Tapes
- Telephone
- Test kits
- Thermometers
- Timer
- Tourniquets
- Transportation carts
- Triple beam balance
- Tube racks
- Tubing
- Tweezers
- Ultra centrifuge
- Urinalysis instruments
- Urine dipsticks
- Vacutainer tubes
- Volumetric Flasks
- Water bath
- Weight scale

**Worker Traits and Behaviors**

- Acceptance of criticism
- Adaptable
- Analytical balance
- Critical thinking
- Cultural Sensitivity
- Decisive
- Dependable
- Detail-oriented
- Disciplined
- Efficient
- Flexibility
- Follows Instruction
- Handle stress
- Initiative
- Integrity
- Intelligent
- Interpersonal skills
- Loyal
- Multi-tasking
- Organized
- Prioritizing
- problem solver
- Professional
- Punctual
- Resourceful
- Respectful
- Responsible
- Self-motivated
- Tactful

- Team player
- Thorough
- Tolerant

