Medical Diagnostic Laboratories (MDL) is a CLIA certified clinical laboratory with multiple state licensing, specializing in state of the art, automated DNA based molecular analysis of a variety of chronic and infectious illnesses. MDL specializes and performs Polymerase Chain Reaction (PCR) with a larger menu of testing available in the field of infectious disease.

Our main theme of research is in the field of Gynecology, Infectious Diseases, Infectious Arthritis, Tick-borne Diseases, Mycology, and Chronic Fatigue Syndrome (CFS). MDL is currently expanding and is looking for Full-Time reliable Laboratory Technicians in our Houston, TX facility.

*This position would require travel to our main location in Hamilton, NJ for training for an extended period of time.*

**Essential Functions:**

**Accessioning:**

- Print labels and attach to requisitions and the corresponding specimens
- Properly accession multiple specimen types
- Take photographs of all specimens received
- Properly identify any discrepant information
- File all paperwork in order and distribute to the appropriate QC bins
- Properly scan accessioned requisitions
- Scan 2-D barcode elution tubes used for extraction
- Properly locate and record temperatures for all necessary stations

**Manual Extraction:**

- Perform Phenol/Chloroform manual extractions on biopsies and ticks
- Properly separate samples into their organic and inorganic layers via phenol/chloroform
- Properly perform quantitative analysis and hydrate all ticks and biopsies

**Robotic Extraction:**

- Properly extract all samples types using a provided XG sheet as a template
- Properly set up liquid handling robotics for each extracted XG sheet with the correct volumes of all necessary reagents
- Properly dispose of all waste material when required; both hazardous and non-hazardous
- Attend to robotics to address any user interactions and/or robotic malfunctions
• Manually extract all necessary samples via commercial kits

RNA Extraction:

• Perform manual RNA extractions via Qiagen kit for all necessary samples
• Perform robotic RNA extractions via VX Reagents kit for all necessary samples

PCR:

• Perform manual and robotic Conventional method PCR amplification
• Properly load and start thermocycler machines
• Perform manual and robotic Real-time method PCR amplification
• Properly load and start Rotor-gene thermocycler
• Perform initial analysis on completed Real-time PCR
• Perform Acoustic Real-Time PCR method for amplification with the aid of the ATS-100 Acoustic Dispenser
• Properly load and start Bio-Rad CFX thermocycler
• Perform initial analysis on completed Acoustic Real-Time PCR

Gel Electrophoresis:

• Properly identify which completed PCRs from the thermocycler require gel electrophoresis
• Properly identify when to make and/or use 2% versus 2.5% gels
• Complete blank gel template sheets to combine short PCR sheets
• Use dye to stain all necessary samples with the appropriate volume on a test by test basis
• Properly load correct agarose gel with the appropriate volume of ladder and sample; in addition properly identify the appropriate settings on which to run each gel (i.e. voltage & time)
• Properly capture a visual image of the gel with the use of a SYNGENE UV gel reader
• Be able to troubleshoot any gel box or power source errors, as well as any gel reader errors

Pyrosequencing:

• Properly perform nested PCR prior to sequencing
• Properly load and run Sequencing Analysis reactions (SQA)
• Properly load and run Single Nucleotide Polymorphism reactions (SNP)
• Properly analyze all run data
Micro-Biology/Cell Culture:

- Inoculate appropriate plate with swab media; for *Candida* species, Urinary Pathogens, GBS, *Enterococcus* species, and the Wound Panel; Streak for single colonies
- Properly determine specific species present, and inoculate appropriate plate with said species on a quad plate preloaded with antibiotics, or an agar plate stamped with antibiotic discs
- Properly analyze growth plate to determine antibiotic susceptibility or resistance
- For GBS Antibiotic Resistance testing, properly assemble rack and operate Anaerobic Chamber System
- Identify and pick colonies for PCR
- Perform CAMP test and analyze for zones of hemolysis

Next-Generation Sequencing:

- Properly perform a series of nested PCRs for BRCA, HPV, and Cystic Fibrosis
- Properly attach samples to appropriate bead mixtures
- Properly perform beads cleaning to remove unused dNTP’s and primers within the amplified PCR product
- Properly perform gel purification with the use of the Pippin Prep machine
- Properly load and operate multiple Life Technologies Equipment
- Properly analyze all run data

Additional Responsibilities:

- Performs other similar or related duties as required or assigned.
- Assures activities are conducted in a safe manner and materials are handled according to safety guidelines.
- Assures customer privacy is maintained at all times.
- Participates as a team member and is accountable for own work responsibilities.
- Assures information is delivered in a manner that is supportive, timely and understandable.
- Initiative is demonstrated to proactively diagnose and resolve problems.
- Productive work habits are consistently displayed.
- Accuracy and quality are maintained for all activities.
**Job Qualifications:** General Knowledge, Skills, and Abilities (KSA’s) required

- 9 month Clinical Laboratory Technician training

**Physical Demands:** Physical, Mental and workplace Environment Conditions

- Ability to sit, stand, walk and perform repetitive motion (manual pipette)
- Proficient visual and audio skills

**Working Conditions:** Workplace Environment Conditions

- Laboratory setting
- Use of personal protective equipment

**Education and Experience:**

- Bachelor Degree in Biology, Chemistry, or related science field

**We Offer:**

- Competitive Salary
- Medical, Dental & Vision Insurance
- Short and Long Term Disability
- Life Insurance
- Dependent Care Flex Spending Account
- Voluntary Policies (Accident, Hospital Indemnity, Critical Illness & Supplemental STD)
- Legal Plan & Identity Theft Protection
- 401(k) Plan
- Paid Vacation & Holiday
- Business Casual Environment
- Credit Union

Medical Diagnostic Laboratories, LLC is an equal opportunity employer.