TITLE: Sr. Laboratory Automation Engineer
Reports To: Director of Engineering

POSITION SUMMARY:

The Senior Laboratory Automation Engineer is responsible for successful development, implementation, calibration and verification of new equipment and processes in the laboratory. The Laboratory Automation Engineer also assists in the transfer of newly developed assays from the development stage to routine practice in the laboratory in a manner that is consistent with the goals of Oxford Diagnostic Laboratories and in compliance with the Quality Management System. Critical to the role is ensuring compliance with regulatory standards, laws and requirements of requisite agencies by employing appropriate systems/processes.

ESSENTIAL FUNCTIONS:

- Applies laboratory automation experience to the process development, improvement, and troubleshooting of laboratory procedures and workflows at the Norwood facility.
- Creates, consults, and contributes to the criteria and selection of equipment and processes to facilitate the automation of all laboratory testing and needed modifications.
- Performs a critical role in the engineering and scale-up of Blood Donor Screening. Develops automated solutions (third party and custom) for the PCR and IFA workflows. Develops systems that will enable rapid and efficient capacity scale-up, using laboratory robotics.
- Contributes to process engineering projects in the Tick-Borne Disease and TSpot laboratories, including automated DNA extractions, tube labeling, tube sorting, aliquots, PCR setup, liquid dispensing on slides, and slide loading on microscopes.
- Applies expertise in liquid handling robotics, tube labeling and capping, tube and microplate handling, specimen storage, and other lab automation technologies.
- In collaboration with IT, leads system integration projects through the development of instrument drivers and LIS interfaces. Develops software solutions to fill gaps in third-party workflow software solutions. Identifies opportunities to build and integrate sample tracking capabilities to complement our future LIS.
- Implements new barcode labeling and scanning capabilities to achieve 100% complete chain of custody in sample tracking.
- Collaborates with key stakeholders to identify creative and novel solutions to workflow challenges. Prepares detailed project plans in line with R&D strategy.
- As part of a multi-site team, actively contributes to projects at other sites as needed.
- Identifies opportunities to expedite or improve project completion, develop new projects, or new uses of current technology.
- Ensure that conclusions in written reports reflect the data presented and reports are of the highest quality. Reviews and/or author SOP’s in support of the testing processes.
- Supervises junior staff as required.
TITLE: Sr. Laboratory Automation Engineer  page 2

Reports To: Director of Engineering

QUALIFICATIONS:

- PhD, MSc, or BS in Engineering or life sciences, preferably Biotechnology or Biochemistry
- Requires the analytical skills necessary to plan for, design or enhance highly-complex systems and programs, resolve problems requiring a comprehensive and state-of-the-art awareness of automation, instrumentation and scientific field
- Must have experience with automation and instrumentation (implementation and troubleshooting)
- Proficient with IT project management and software implementation
- Previous experience in liquid handling automation, tube labeling and scanning, sample handling automation, and integrated robotic systems is highly desirable.
- Previous experience in PCR, DNA Extractions IFA, microscopy and imaging, immunological assays, T cell activation assays, Elisa, cell assays, cell cultures is also desirable.
- Ability to work independently and demonstrate a high degree of personal & professional initiative
- Problem solving ability - able to develop creative, practical solutions that meet business objectives
- Strong project management skills to create, adapt and follow work plans
- Strong scientific writing skills
- Ability to work in a global, multicultural collaborative team environment
- Strong organizational/time management; able to manage multiple competing priorities simultaneously
- Excellent verbal and written communication skills
- Familiarity with Quality System concepts and CLIA requirements.
- Experience working with FDA-regulated products is strongly preferred.
- Breaks problems/project plans down into their component parts analysing links and potential implications
- Shows proactivity in identifying and then overcoming problems.
- Knows how their role fits in with the whole process
- Takes responsibility for delivering the required results to the required standards
- Acknowledges the importance of high standards and works to get things right first time every time
- Keeps others informed about progress without needing to be prompted

PHYSICAL DEMANDS:

The physical demands described within the Position Responsibilities section of this job description are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly required to be independently mobile. The employee is also required to interact with a computer, and communicate with peers and co-workers.