Title: Mechanical Engineering Lead
Location: Marlborough, MA

About Akoya Biosciences, Inc.

Akoya Biosciences, Inc., The Spatial Biology Company™, with offices in Menlo Park, CA and Marlborough, MA is a well-funded and growing company that develops powerful imaging tools that enable scientists and clinical researchers to gain a better understanding of complex diseases such as cancer and autoimmune disorders. Our CODEX® platform, spun out of the lab of Dr. Garry Nolan at Stanford University, enables the assessment of more than 40 protein markers in a sample and is ideally suited for biomarker discovery. Our Phenoptics platform, the industry standard for multiplex IF/IHC provides the assay robustness and throughput necessary for translational and clinical research required in clinical trials. Our partnerships with the academic community and our customers have resulted in a robust pipeline of future products.

Position Summary

Akoya Biosciences is looking for an experienced Mechanical Engineering Lead (Instrumentation and Fluidics) to join our R&D team. Akoya's R&D group develops automated laboratory imaging instrumentation and automated liquid handling systems that support fluorescent tissue pathology applications. This position will play a critical role in the support and design of custom electro- and opto- mechanical parts and subassemblies. This position will also lead the development and testing of novel fluidic consumables and reusable fluidic interfaces. The position will also provide guidance to junior level mechanical engineers and R&D scientists.

The Marlborough campus has implemented a quality system and development process that are compliant with ISO-13485 and recently received ISO-13485 certification. The Mechanical Engineering Lead will be expected to participate and adhere to ISO-13485 practices.

Key Responsibilities

- Provide guidance and leadership in the design, verification, and integration of automated optical and liquid handling instrumentation, sub-assemblies and consumables.
- Perform experiments to test, verify, and troubleshoot novel reagent consumable and interface designs (from a mechanical engineering perspective).
- Design parts and subassemblies in SolidWorks and generate drawings that can be used by external vendors to manufacture parts. Maintain system-level models.
- Interface with external design/manufacturing partners and consultants for instrumentation and consumables.
- Be the automated liquid handling technical expert in a cross-functional team of scientists, engineers (R&D, Quality, Manufacturing), and service/support.
- Support the design transfer of parts, instruments, and reagent consumables from R&D to manufacturing.

Required

- 10-15 years of mechanical engineering experience, preferably in a life sciences or medical device company
- Experience in design and development under the guidance of an ISO-13485 Quality System
- Bachelor's or Master's or Ph.D. Degree in Mechanical Engineering with a preferred specialization in electro-mechanics, opt-mechanics, or fluid mechanics
- Practical experience in designing mechanical parts with appropriate consideration to tolerances and interaction with complimentary parts
- Practical experience in the design and development of automated optical instrumentation and/or automated liquid handling solutions
- Expert in Solidworks (or equivalent), version control, drawing creation with part Manufacturing in mind
- Willingness to mentor junior Mechanical Engineers

Skills and Qualifications

- Excellent communication skills (enjoys working with diverse team members)
- Experience designing optically-based laboratory instrumentation that includes multiple axes of precision motion
- Solid understanding of appropriate technologies for fabrication of high-precision, low- to medium-volume laboratory instrumentation
- Fluidic consumable design and verification, including modeling
- Proficiency in SolidWorks modeling, detailing, PDM, and simulation functions
- Well-versed in Product Data Management documentation standards, BOM maintenance, and Rev control
- Working knowledge of medical device design standards and quality requirements
- Experience with phased-gate product development
- Proficient in Microsoft Office
- Ability to multi-task and manage priorities
- Strong organizational skills and attention to detail
- Flourishes in a highly dynamic and small company environment

Additional Skills (ideal but not required)

- Familiarity with NRTL testing of EMI, EMC, and safety for CE certification
- Familiarity with ISTA transport testing and the product and packaging integrity required for successful testing
- Knowledge of fluorescence, fluorescent imaging and reagents