# Senior Scientist II, Assay Development

Atsena Therapeutics is a clinical-stage gene therapy company that is leveraging novel AAV vectors designed to overcome the unique hurdles presented by retinal disease to reverse or prevent blindness. Our lead program, ATSN-201, is a gene therapy for X-linked retinoschisis (XLRS), which is currently being evaluated in a Phase 1/2 clinical trial. Our second clinical program, ATSN-101, is a gene therapy for the treatment of *GUCY2D* Leber congenital amaurosis (LCA1) which we are advancing towards a Phase 3 trial. We are also advancing a preclinical program for *MYO7A* Usher syndrome (USH1B) and have additional preclinical programs to treat other forms of inherited retinal disease as well as novel capsid technology suitable for addressing large indications.

At Atsena, we are bringing patients into focus. We are passionate about finding cures for visually impaired and blind individuals and are driven by cutting edge science to ensure we achieve the safest and most effective results.

**Position Summary:**

We are seeking a highly motivated and experienced Senior Scientist II to advance our pipeline. The successful candidate should be a self-starter and have the ability to work effectively with an exciting, fast paced, and highly collaborative team focused on the development of ocular gene therapies. The successful candidate will be responsible for developing assays that demonstrate molecular mechanisms and biological function of AAV transgenes. Experience with assay development and validation is required and a background in gene therapy is a plus. Experience in the eye is preferred. The position requires attention to detail and the ability to multitask across multiple, concurrent projects. The ideal candidate will have a solid foundation in assay development, molecular biology techniques, protein purification, reagent development, mammalian cell culture, flow cytometry and NGS data analysis. This is a lab-based position (80%).

**Responsibilities:**

- Design, develop, and optimize potency assays for various AAV-based products, ensuring they meet company and regulatory standards.
- Perform laboratory techniques including DNA/RNA purification and analysis (qPCR, ddPCR, RT-qPCR, NGS), protein and antibody purification, and analysis (SDS-PAGE, WES/JESS, ELISA, MSD), cell culture, flow cytometry.
- Work collaboratively with cross-functional teams, including other scientists, regulatory leads and quality personnel to support development and regulatory submissions.
- Oversee the internal transfer of biological assays to the analytical development team and support the transfer and validation processes with external vendors and CROs.
- Analyze experimental data using appropriate statistical methods and software (SQL, Python, JMP, GraphPad Prism); interpret results and provide recommendations based on findings.
- Investigate assay performance issues and implement corrective actions to improve robustness and reliability.
- Provide guidance and mentorship to direct reports, junior scientists and laboratory staff in assay development methodologies, experimental design and data analysis techniques.
- Meticulous record keeping, documentation, and reporting of research.
- Contribute to/author study reports, study protocols, and SOPs.

- Comply with standard laboratory practices and company policies, including documentation and biosafety policies.
- Contribute to the overall mission and culture of Atsena Therapeutics.

**Professional Experience and Qualifications:**

- Ph.D. or equivalent degree in biomedical sciences, preferably with a focus on biological assay development with 6+ years' experience.
- Experience working with gene therapies is preferred. Ocular gene therapy experience preferred.
- Demonstrated expertise in assay development and validation. Experience in potency assays and regulatory submissions is a plus.
- Proven hands-on experience with molecular biology techniques, cell culture, ELISA, or other relevant assay methodologies; strong analytical skills in data interpretation.
- Demonstrated proficiency in maintaining meticulous and organized records using electronic lab notebook software (Benchling, IDBS, LabArchives, etc.).
- Experience in performing NGS experiments, specifically Nanopore Sequencing, including bench work and data analysis, as well as proficiency in statistical interpretation of results.
- Experience in GxP documentation, and knowledge of FDA guidelines on method development/validation and/or ICH and USP bioanalytical procedures is a plus.
- Comprehensive experience with biochemistry, cellular biology, and molecular biology and deep experience in biological assay development.
- Strong critical thinking and troubleshooting abilities; adept at analyzing complex data sets and deriving actionable insights.
- Strong verbal and written communication skills.
- Ability to balance working collaboratively with a team and taking independent ownership of tasks.
- Passion for translational research, scientific innovation and creative problem solving.
- Excellent attention to detail and organizational skills, with a focus on quality
- Ability to effectively prioritize time and manage multiple projects in a fast-paced environment.

**Competencies**:

- Accountability & Self- Management
- Communication
- Open minded & Innovative
- Planning & Organization
- Problem Solving
- Quality
- Teamwork

**Role Location**

- Onsite