



## Senior Scientist I: Assay Development

### Company overview

Amplified Sciences is a startup life science diagnostics company focused on accurately detecting and pre-empting the risks of debilitating diseases, including lethal cancers and organ loss with R&D operations in Purdue Research Park and research alliances in San Francisco and Boston. The company is developing a portfolio of diagnostic assays for early detection of disease. An ultra-sensitive molecular sensing technology licensed from Purdue tech transfer operates with novel test-strips that combine with portable instrumentation to form a highly versatile clinical assay platform that can scale to point of care.

If you are ready for the challenges of a life science startup whose mission is to revolutionize debilitating disease detection, then join us in our journey.

### Senior Scientist-Assay Development:

The Senior Scientists at Amplified Sciences, LLC are at the forefront of the company research and development, solving challenging problems for our diagnostic products that will deliver solutions to meet unmet medical needs. The Senior Scientist-Assay Development position involves a variety of scientific activities and requires the person to be self-reliant, resourceful and dedicated to solving tough problems across the research and development pipeline. The Senior Scientist-Assay Development position will lead the development of clinical assays from feasibility to standardization suitable for transfer to a clinical diagnostic laboratory.

The successful candidate will have strong theoretical and practical experiences in one or more areas:

**ASSAY DEVELOPMENT:** extensive hands-on experience with assay platforms suitable for clinical applications including RNA/DNA molecular diagnostics, immuno-based diagnostics, enzyme assays, membrane-based homogeneous assays, rapid tests, nanomaterials applications, and other biosensor-based analytical & diagnostic instrumentation.

**ANTIBODY DEVELOPMENT,** monoclonal ab, phage display, converting mAb into expression vectors.

**DNA/RNA PROBE DEVELOPMENT,** design of nucleic acid probes, nucleic acid chemistry, hybridization assays, analytical and diagnostic instrumentation

The focus will include creation and commercial development of protocols for binding assays, immobilization of ligands, enzyme assays, and the preparation of reagents, membrane, and other biosensor surfaces suitable for clinical applications.

### Responsibilities:

- Develop high-performance systems for translational research, clinical diagnostics, and near-patient diagnostic applications using proprietary technologies.

- Develop and perform assays for product development, process validation, and quality control analysis.
- Plan, design and perform scientific experiments to benchmark system performance.
- Work closely with other Scientists and Engineers to provide scientific inputs related to company products.
- Ability to interact with end-users to identify needs and organize for specific customer applications.
- Contribute company peer-reviewed publications, attend and present at relevant industry conferences
- In collaboration with Director and CSO, define technology development tasks, objectives, resources, and budgets for the research development team
- Assist in the definition and development of grant and contract proposals
- Demonstrate the highest levels of health and safety, personal integrity and ethics

**Key requirements:**

- Preferably Ph.D. in Analytical-Physical Chemistry, Biochemistry, Clinical Chemistry, Immunology or related fields with at least two years of experience in the development of molecular-based diagnostic assays in a commercial environment.
- Prior work with clinical chemistry for analytical & diagnostic instrumentation, biosensors, lateral flow and/or colorimetric assay development.
- Proven track record of successful research and publications
- Experiences with optical spectroscopy preferred (optical readers, data extraction, and analysis software)
- Experience with monoclonal antibody technology development is a plus.
- Strong quantitative intuition, plus excellent experimental design and data analysis skills.
- Be a 'hands-on' person who welcomes challenges, works independently or as part of a team, and can communicate effectively at all levels.
- Background in biochemical technologies and prior experience in the development and validation of ligand binding and enzyme assays
- Demonstrated excellence in organizational and communication skills. The ability to understand and communicate technical scientific information to a wide range of customers.

- The ability to thrive with increasing levels of responsibility
- Proficient in using Word, Excel, and PowerPoint; some experience with data analysis and presentation tools such as GraphPad Prism or Origin; additional expertise with chemometrics and automated data analysis tools preferred.
- Flexibility, creativity and internal motivation to succeed.

**Job location:**

- Work will be performed at locations in West Lafayette and Indianapolis, Indiana
- Remote work is possible when performing work outside of lab duties