

## LEAD SENIOR SCIENTIST-IMMUNOASSAYS

### Summary

Accomplished immunassay scientist with broad expertise in immunology, neurology, hematology/thrombosis, gastroenterology, and general pathology. Experience in cell culture (primary and established lines), flow cytometry, qPCR, sequencing, protein purification, protein expression, and clinical trial study design.

### Skill Highlights

- Problem solving for assay methodology and optimization
- Protocol writing in accordance to GLP and CLIA standards

### Accomplishments

- Discovered a new potential biomarker for monitoring ALS.
- Characterized the role of coagulation factors and platelets in immune responses to vascular injury in a feline model.
- Managed pre-clinical trial investigations in rodent models of inflammatory bowel disease which lead to clinical trial studies of IL-1RA and the role of bacteria in Crohn's and colitis.
- Developed an in vitro assay for studying neurite and Schwann cell outgrowth along nanofibers.
- Optimized an ELISPOT assay for neoantigen identification in a mouse tumor model of glioblastoma.

### Professional Experience

Lead Senior Scientist-Immunoassays Feb 2015 to Current

Baylor College Of Medicine 1/4 Mcallen , TX

- Manage daily operations for the immunoassay section of a new immunomonitoring laboratory (IML) core facility.
- Implemented GLP standards and adapted protocols to meet CLIA certification.
- Consult with Investigators regarding which assays and samples are best for their clinical trial and research plans.
- Review and implement new technologies (Luminex, Nanostring, Digital single cell sequencing, iLab Solutions for core management).
- Emphasize quality, timeliness and attention to detail while performing immunoassays. Our clients comment that my work is of the highest quality compared to their previous experience with CROs.
- Train new employees, Post-doctoral trainees, and students.
- Established Quality Controls for internal performance of mouse and human immunoassays.
- Prepare written documentation of the assay procedure, data compilation, and explanation of the results.
- Assist the cytometry and tetramer production specialists as needed.
- Prepare reports for monthly meetings and annual reviews.

Post-doctoral Trainee Sep 2009 to Jan 2015

Milford Regional Medical Center 1/4 Hopedale , MA

Investigated B cell responses to vaccines in infants having cardiac transplant. The project entailed using pediatric patient samples to develop ELISPOT and flow cytometry assays for characterizing vaccine-responsive memory B cells.

My second post-doc position was in Neurology. I utilized my flow cytometry to identify a potential blood biomarker in human ALS subjects. I also established immunohistochemistry, primary and organotypic culturing techniques for the investigation of immune changes during diabetic neuropathy in a mouse model.

Research Technician III Sep 1990 to Dec 2008

University Of North Carolina 1/4 City , STATE

Worked for a clinical research investigator in Gastroenterology from 1990-1994. Our work led to 4 manuscripts and establishment of the idea that bacteria can promote inflammatory bowel disease.

Worked for the Division of Laboratory Animal Medicine from 1994-2008. I managed research projects of two DVM/PhDs investigating cardiovascular changes, thrombotic disorders, regulatory T cell functions in mice, and neutrophil functions in various animal models. I also performed clinical testing for the Division as needed. One project led to my PhD thesis work.

Medical Technologist, generalist May 1989 to Jul 1990

Missouri Baptist Hospital 1/4 City , STATE Clinical laboratory work in all areas of the laboratory.

### Skills

Bioassays, ELISA, cell culture, protein purification and identification, nucleic acid (qPCR, genotyping, sequencing, micro RNA detection) techniques.

### Education

Ph.D. , Molecular and Cellular Pathology 2009 University of North Carolina at Chapel Hill 1/4 City , State , USA

- Advisor: Dwight A. Bellinger, DVM/PhD

Bachelor of Science , Medical Technology 1989 St. Louis University 1/4 City , State , USA Certification in Medical Technology (ASCP)