

ASSOCIATE SCIENTIST III

Professional Overview

Research Biologist with 6 years of experience in Neuroimmunology. Adept at coordinating and executing in vivo and in vitro research studies. Demonstrated talent for leadership, including coordinating the activities of research teams, providing laboratory oversight, and establishing the necessary processes and procedures for research activities.

Core Qualifications

- Cell Culture
- Survival rodent surgeries
- AAV Gene Delivery
- Immunohistochemistry
- IP, IV, SC, PO dosing
- Flow Cytometry
- Inventory management
- Western blot
- RNA, DNA isolation
- Immunoprecipitation
- Illustrator, ImageJ
- ELISA, MSD

Education

MBA : Business Administration 2017 FITCHBURG STATE UNIVERSITY City , State , USA Business Administration

Master of Science : Pharmaceutical Sciences 2010 NORTHEASTERN UNIVERSITY City , State , USA Pharmaceutical Sciences

Experience

Associate Scientist III 08/2015 to Current Planet Pharma Princeton Pike , NJ

- Establish primary neuronal cell culture as well as glial cells like microglia and astrocytes.
- Develop phagocytosis assay using THP-1 cells and Flow cytometry as a read out.
- Protein expression in CHO, HEK293 and HeLa cells using cDNA.
- AAV mediated gene delivery in P0 and adult mice.
- Determine the A.
- levels using MSD multi-spot assay system.
- Characterization of Tau P301S (PS19) mice to define progression of Tau pathology using biochemistry and immunohistochemistry.
- Perform large scale efficacy studies using in-house drug targets in PS19 mice.
- Measure Tau levels in brain and cerebrospinal fluid using immunoblotting and ELISA.

Consulting Scientist 10/2014 to 07/2015 Waters Corporation Unavailable , PA

- Develop customized FACS protocol on the Sony SH800 FACS machine.
- Stem cell isolation using flow cytometry.
- In vivo surgeries including Kidney capsule and subcutaneous xenograft model.
- Primary cell line establishment from human, non-human primate, porcine, mouse, bovine samples.
- Histology procedures including sample collection, fixation, tissue embedding.
- processing, cryotomy and microtomy of frozen/embedded samples, H&E staining.
- Antibody validation using western blot, IP and ELISA.
- Immunohistochemistry, immunocytochemistry, immunofluorescence.
- Cell line validation using RT-PCR.
- Lentiviral transfection of established primary cell line.

Senior Research Associate/Laboratory Manager 03/2012 to 09/2014 Harvard University Allston , MA

- Optimize in vivo models for Subarachnoid Hemorrhage.
- Stereotactic surgeries including intracerebroventricular and intrathecal injections.
- Design and develop in vitro models for neuroinflammation and neurodegeneration.
- Propagate and maintain mammalian cell lines.
- Immunophenotyping using FACSCalibur to detect cell surface as well as intracellular markers and analyze data using FACSDiva, FlowJo and CellQuestPro.
- Cell separation/enrichment by density gradients and by antibody conjugated magnetic beads, cryopreservation of cell lines.
- Characterization of protein expression by immunoblot analysis.
- Immunoprecipitation and affinity capture of proteins for signal transduction studies.
- Provide training and work direction to the staff members in the lab.
- Preparation and submission of manuscripts for publication in scientific journals.
- Present data to the lab members and collaborators on a bi-weekly basis.
- Order lab supplies, maintain inventory, co-ordinate with sale representatives to obtain best pricing for the lab supplies.

Research Assistant II 10/2010 to 03/2012 BETH ISRAEL DEACONESS MEDICAL CENTER City , STATE

- Major role in setting up lab, establishing techniques, connections and trouble-shootings Developed and used in vivo mouse models for subarachnoid hemorrhage Maintained murine colonies used for transgenic and knockout experiments; DNA isolation from tail and genotyping, I.P, I.V, I.M and S.C injections Conducted histology procedures including sample collection, fixation, tissue embedding, tissue processing, cryotomy and microtomy of frozen/embedded samples, hematoxylin and eosin staining, immunohistochemistry Measured levels of cytokines IL6, IL4 and TNF by ELISA Isolated and purified RNA from cells and tissues; performed PCR, RT-PCR, cDNA synthesis.

Publications

1) Schallner, N., Pandit, R., LeBlanc, R., Thomas, A.J., Ogilvy, C.S., Zuckerbraun, B.S., Gallo, D., Otterbein, L.E., and Hanafy, K.A. (2015). Microglia regulate blood clearance in subarachnoid hemorrhage by heme oxygenase-1. *J. Clin. Invest.* 2) Provided technical assistance: Hanafy, K. A. 'The role of microglia and the TLR4 pathway in neuronal apoptosis and vasospasm after subarachnoid hemorrhage.' *J. Neuroinflammation* 10, 83 (2013)

Skills

Adobe Illustrator, Adobe Photoshop, biochemistry, bi, C, Cell Culture, SC, Delivery, direction, DNA, ELISA, experiments, IBM, Illustrator, Image, Imaging, injections, maintain inventory, Inventory management, IP, Macintosh, Excel, PowerPoint, Windows, Microsoft Word, pathology, PCR, pricing, Prism, publication, read, RT-PCR, sample collection, scientific, SPSS, validation, Vista