

RESEARCH SCIENTIST

Professional Overview

Highly motivated and meticulous research scientist with 14 years experience seeking a career as a clinical research associate for a prominent healthcare company. Exceptional leadership skills and a strong work ethic.

- Experienced in study design, project management and data analysis.
- Exceptional organizational and problem solving skills with a high attention to detail.
- Experienced manager with good oral and written communication skills.
- Able to work independently and in a collaborative matrix environment.

Education

Masters of Science : Animal Biology 2010 University of California-Davis City , State

Bachelors of Science : Microbiology 2000 North Carolina State University City , State

Bachelors of Science : Zoology 2000 North Carolina State University City , State

Experience

Research Scientist 04/2012 to Current Intel Corp. Hudson , MA

Project Organization Experience

- Responsible for the design, execution and management of multiple behavior-related research projects conducted jointly between UTSW and Brookhaven National Laboratories in Long Island, NY (NASA-funded).
- Assist the PI in authoring study protocols, proposals and IACUC amendments for research and animal use.
- Create and maintain database of study information, data collection and statistical analyses.
- Manage all correspondence and documentation between departments and research institutions in order to coordinate and conduct research studies.
- Ensure study compliance with all institutional laboratory safety and IACUC animal guidelines.
- Lead meetings and provide study updates to team members, including research data and project timelines.
- Present research findings at regional and national scientific meetings and authored manuscripts for submission to peer-reviewed journals.

Laboratory Experience

- Manage laboratory animal colony of 1000+ animals.
- Reduced operating costs by 85% in an 8-month time frame.
- Train and supervise research fellows and students on molecular biology techniques and behavior assays related to cognitive function.
- Provide technical expertise in histology to laboratory fellows and graduate students as required.

Staff Research Assistant II 03/2002 to 08/2006 Ppd Seattle , WA

Project Organization Experience

- Design and independently execute experimental studies on neurogenesis and cognition.
- Responsible for data analysis and interpretation of cognitive behavior assays and microscopic quantification.
- Train and assist postdocs, technicians and student workers in behavior testing, experimental design, histology and microscopy.

Laboratory Experience

- Extensive experience in cognitive and psychomotor behavior testing and data analysis in rodent models.
- Skills in rodent handling, animal perfusions, and tissue harvesting of brain and spinal cord from adult mice and rats.
- Highly proficient in tissue processing, immunohistology, and administering compounds by injection through various routes in mice and rats (p.o., s.q., i.m., i.p.).

Assistant Scientist 07/2000 to 08/2002 Cogent Neuroscience Inc. City , STATE

Project Organization Experience

- Participated as part of matrix team environment to address and meet study goals related to company's research interest.
- Met regularly with team leaders and managers to discuss research progress and develop goals and priorities.
- Consistently produced data and met deadlines in a fast-paced biotech environment.

Laboratory Experience

- Experience in multiple research teams including robotics, small molecule screening and characterization groups.
- Able to quickly learn and utilize new biolistic techniques for gene therapy research.
- Proficient in molecular biology and in-vivo assays including PCR, plasmid preparation, gel electrophoresis, and immunofluorescent staining.

Publications

- **Lucero M.J.** , Redfield R.L., Ito N., Yun S., Mukherjee S., Shih H-Y., Rivera P.D., Birnbaum S.G., Chen B.P.C., Fisch A.J. Space radiation

- improves pattern separation in older mice without influencing gross hippocampal function. In preparation.
- Bett C, Kurt TD, **Lucero M**, et al. Defining the conformational features of anchorless, poorly neuroinvasive prions. PLoS Pathog. 2013; 9(4):e1003280
 - Bett C, Fernández-Borges N, Kurt TD, **Lucero M**, Nilsson KP, Castilla J, Sigurdson CJ. Structure of the *b* 2- *a* 2 loop and interspecies prion transmission. FASEB J. 2012 Jul; 26(7):2868 - 76.
 - Masliah E, Rockenstein E, Inglis C, Adame A, Bett C, **Lucero M**, Sigurdson CJ. Prion infection promotes extensive accumulation of *a* -synuclein in aged human *a* -synuclein transgenic mice. Prion. 2012 Apr-Jun; 6(2):184-90.
 - Bett C, Joshi-Barr S, **Lucero M**, Trejo M, Liberski P, Kelly J, Masliah E, Sigurdson CJ. Biochemical properties of highly neuroinvasive prion strains. PLoS Pathog. 2012 Feb; 8 (2):e1002522.
 - Kannangara TS, **Lucero MJ**, Gil-Mohapel J, Drapala RJ, Simpson JM, Christie BR, van Praag H. Running reduces stress and enhances cell genesis in aged mice. Neurobiol Aging 2011 Dec; 32(12):2279-86.
 - van Praag H, **Lucero MJ**, Yeo GW, Stecker K, Heivand N, Zhao C, Yip E, Afanador M, Schroeter H, Hammerstone J, Gage FH. Plant-derived flavanol (-)epicatechin enhances angiogenesis and retention of spatial memory in mice. J. Neuroscience, 2007 May; 27 (22):5869 - 78.

Skills

- Computer Platforms: PC and Mac
- Software Programs: MS Office, MS Outlook, FileMaker Pro, PeopleSoft, Adobe Photoshop, Endnote
- Statistical Software: GraphPad Prism, SAS, Sigma Plot