

Morgan C. Mizell

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WORK EXPERIENCE

Incyte Corporation (Contractor through Proclinical), Wilmington, DE USA 03/2019 - 06/2019
Staff Scientist, Translational Sciences

- Assisting in two assay development/optimization projects for Translational Sciences group in both cell culture and patient blood, with endpoint flow cytometry or MSD, in accordance with ICH and GCP guidelines. Flow cytometry data analyzed using FACSdiva and FlowJo software.
- Utilize innovative techniques such as MSD, ELLA, and multi-color flow cytometry to assess pharmacological activity of drug compounds in oncology clinical trials.

WuXi Advanced Therapies, Philadelphia, PA USA 10/2017 - 08/2018
Research Associate, Analytical Development

- Collaborated with Analytical Development team to develop a lentivirus infectious titer assay with endpoint flow cytometry analysis.
- Reports to Study Director with responsibility of conducting all viral clearance and custom assays according to and in compliance with GLP, cGMP, CFR, and PTC guidelines and SOPs.
- Successfully performs all cell biology functions including new recoveries and maintaining cell pellets and mammalian cell culture lines.
- Co-wrote the SOP for MACSQuant flow cytometer, which is used for lentivirus infectious titer assays, a main assay in WuXi's gene therapy platform.

Research Vector Core, Children's Hospital of Philadelphia, Philadelphia, PA 07/2017 - 10/2017
Research Technician

- Followed GLP in creating recombinant adeno-associated virus (AAV) and lentiviral (LV) vectors for gene transfer experiments in basic and pre-clinical research.
- Produced appropriate buffers and reagents for adeno-associated virus (AAV) and lentivirus (LV) harvesting, production, and transfection assays.
Managed quality control experiments to assess the purity of the viral vector product.
- Developed a new organizational system and database for client and in-house plasmids.

GlaxoSmithKline, King of Prussia, PA US 03/2016 - 09/2016
Student Scientist

- Handled special staining protocols, including cresyl violet, fast red, black and gold, and toluidine blue stains for R&D Histology.
- Obtained extensive experience in operating under GLP and GMP compliance guidelines
- Led a project which optimized automated in situ hybridization assays in FFPE tissue.

Children's Hospital of Philadelphia, Philadelphia, PA 06/2015 - 08/2015
Research Assistant

- Performed qPCR, ELISA, BCA protein assays to measure IL-4 and IL-6 levels during migraine in mice
- Conducted conditioned place aversion (CPA) behavioral assays in mice, analyzing behavioral data using Excel
- Prepared appropriate buffers, reagents, and dilutions for various assays in lab

Psychiatry Summer Training and Research Program (P-STAR), Johns Hopkins School of Medicine, Baltimore, MD USA 05/2013 - 08/2013
Summer Intern

- Investigated maternal behavior after an immune challenge in female mice
- Independently coded and analyzed recordings of behavioral patterns using Excel

Nestler Lab, Mount Sinai School of Medicine, New York, New York USA

06/2012 - 08/2012

Research Assistant

- Learned and mastered MaxiPrep and MiniPrep protocols (Qiagen) for plasmid purification. Plasmids were used to manipulate viral vectors to express proteins related to the regulation of reward and/or stress responses in cocaine self-administration experiments in mice and rats.
- Performed qPCR, molecular cloning, and inoculation of starter cultures for Dr. Elizabeth Heller
- Recorded and analyzed data from self-administration experiments using Excel

Mechanisms of Sleep Lab-Saint Louis University, Saint Louis, MO

06/2011 - 05/2012

Research Assistant

- Independently performed stereotaxic surgery on 20 Sprague-Dawley rats, lesioning globus pallidus to induce Parkinsonian model of disease.
- Soldered electrodes needed for surgical implantation
- Monitored EEG sleep patterns using MATLAB and analyzed sleep patterns using Excel

Cognitive Control and Psychopathology Lab- Washington University in St. Louis, Saint Louis, MO

06/2011 - 05/2012

Research Assistant

- Summarized scientific reports, collected, archived, and analyzed data, and effectively guided students through informed consent and experimental procedures.
- Assisted doctoral candidate Kimberly Chiew in cognitive pupillometry experiments.
- Recruited undergraduates for cognitive experiments such as AX-CPT, while directly measuring pupillary responses to cognitive and emotional stimuli.
- Analyzed large data files in Excel and E-prime software.

EDUCATION

Tennessee State University Nashville, Tennessee

2020

Ph.D. in Biological Sciences

First year Ph.D. student in Biological Sciences interested in working in a microbiology, public health, or cancer immunology lab.

Drexel University Philadelphia, PA

2014 - 2017

B.Sc. in Biological Sciences, GPA: Concentration GPA: 3.66

Dean's List, 2017

Swarthmore College Swarthmore, PA

2012 - 2013

SKILLS

DNA/RNA isolation, molecular cloning, AAV and lentiviral transfection, qPCR, ELISA, MSD, ELLA, Western blot, PBMC isolation from whole blood, multi-color flow cytometry, knowledge of cancer immunology and microbiology.

AFFILIATIONS

- American Medical Women's Association (AMWA)
- American Medical Writers Association (AMWA)
- American Society for Biochemistry and Molecular Biology (ASBMB)