Michelle Trusgnich

1093 S. Taylor Ave, Saint Louis, MO 63110

mtrusgn0802@att.net (314)780-1445 https://github.com/CoderGirlminion

Skills

Programming Languages:	Operating Systems:	Software:	
Java	Windows	IntelliJ IDE	LIMS
Python	Mac OS	Consed	Polyphred
HTML, CSS	Linux (Red Hat)	GeneScan	Haploview
C, R		SAS	JMP
SQL/MySQL			

Project Experience

LaunchCode- based projects

- Created web application projects that validated form submissions: form restrictions, client-side validation, server-side validation. Integrated a hash function.
- Used SQL to query relational databases. Created tables to establish one-to-many relationships. Configure model objects to have one-to-many relationships.
- Applied Model-View-Controller(MVC) pattern to web application projects that configured one-to-many relationships and many-to-many relationships. MVC pattern managed the persistence of information to database. Open source framework(Hibernate, SpringBoot).
- Git and GitHub Repositories.

Work Experience

Manager/Laboratory, Medros Inc. St.Louis, MO February 2011 – August 2013

- Performed and validated drug testing on Inducible Diabetes and Longevity Studies on validated Drosophilia models
- Screened for candidate genes using Drosophilia cancer and diabetes models.
- Managed all laboratory operations via GLP

Manager/Laboratory, Senior Research Technician May 1996 – September 2010

Washington University School of Medicine, St. Louis, MO

Department of Biochemistry and Molecular Biophysics

- Studied the structure and function of Epidermal Growth Factor(EFG)
- Cultured EGFR mutant lines from CHO(parental line); Transfections – double stable cells
- Dose Response and Time Course experiments; Western Protein Analyses

Department of Internal Medicine (Endocrinology, Metabolism, and Lipid Research

- Studied the structure and function of (calcium-independent) Phospholipase A2 (IPLA2 gene)
- Performed phospholipid hydrolysis – Mass Spectrometry, Assay of Acyl-Carnitine – methanol or butanol; Peptide Extractions; Cell Culture; Mitochondrial and ER staining.

Department of Internal Medicine (Cardiology)

- Identified Nuclear Receptor Transcription Factors associated with Myocardial Energy-Metabolism Genes
- PCR, Sequencing, Cloning, Adenovirus, Genotyping, Taqman PCR, Northern, Southern, Western, RNA extractions,, Whole Cell extracts (cell and tissue), Glucose Tolerance Test, Insulin Tolerance Test; Maintained and managed mouse colonies

Department of Pediatrics (Newborn Medicine)

- Developed and implemented the Genetic Epidemiology Study of Surfactant Proteins
- Performed PCR, Sequencing, Westerns, DNA extractions, Cell culture – fibroblast lines in Case and Control cohorts
- Coordinated and performed statistical analyses: Genes, Proteins, Phospholipids, and Clinical variables
- Co-designed computer program to tract sequencing progress of Surfactant Protein Genes
- Coordinated recruiting process: Human Studies Consent(HSC) and IRB forms

Department of Pediatrics (Pulmonary)

- Coordinated all department operations regarding ABI DNA sequencer and DNA synthesizer; Performed experiments - PCR; Sequencing; Cloning; DNA extractions

Molecular Research Technician - contract, Monsanto-Searle, St. Louis, MO May 1995 – May 1996

- Maintained and operated ABI DNA sequencer
- Performed experiments – Cytochrome p450, PCR, Sequencing, Cloning, Cell culture, ELISA

Medical Research Technician - Washington University School of Med. August1992 - April 1995
Department of Genetics (Center of Genomic Medicine)

- Physical Mapping and Contig analyses of the X chromosome
- Coordinated Pseudoautosomal and Duchenne Muscular Dystrophy Regions
- PCR, cloning, Sequencing, pulse field electrophoresis, hybridization and maintenance of YAC and Cosmid libraries

Education

LaunchCode LC101 and CoderGirl 2017 Winter Cohort – St. Louis, MO January 2018
LC101 Certificate Program

Washington University School of Medicine – Saint Louis, MO December 2005
Genetic Epidemiology Certificate Program

Southern Illinois University – Edwardsville, IL September 1992
Bachelor of Science - Biology