

## ASSOCIATE SCIENTIST AND LAB TECHNICIAN

### Professional Summary

#### Skills

- Enzyme Linked Immuno-Sorbent Assay (ELISA), sited directed mutagenesis,
- northern blot, Southern blot, microarray
- BIOCHEMISTRY
- BIOLOGY
- C
- Cancer
- DNA
- ELISA
- Experiments
- Win6
- MSC
- Neural
- Novel
- PCR
- Programming
- Research
- Transcription
- Troubleshooting

#### Work History

Associate Scientist and Lab Technician , 01/2019 to 06/2019

Paterson , NJ

- Poster presented August, 2017: "Identifying transcription factors that regulate the OSM-9 TRPV channel in the neural membrane of C. elegans using Yeast One hybridization (Y1H) assays" Completed honors-level Capstone research project with undergraduate thesis: "Investigating the role of the Win6mer inhibitor on MLL1 target gene expression in MCF-7 breast cancer cells using qPCR.", MORPHOGENESIS (STEM) LAB, BIOENGINEERING DEPARTMENT, SYRACUSE UNIVERSITY The STEM lab focuses on differentiating human induced pluripotent stem cells (hiPSCs) into cardiac myocytes and other iPSCs into mesenchymal stem cells (MSCs).
- My project: Investigating a novel iPSC to MSC differentiation protocol.
- As part of this project I have:.
- Performed tissue culture of iPSCs and fibroblasts and RNA extraction and cDNA synthesis.
- Conducted qPCR: designed and tested primers using PCR and agarose gel electrophoresis.
- Analyzed qPCR data and conducted troubleshooting as necessary.

Research Assistant , 01/2018 to 12/2018

University Of Massachusetts Medical School “ Mattapan , MA

- BIOCHEMISTRY DEPARTMENT, UPSTATE MEDICAL UNIVERSITY The Cosgrove lab focuses on understanding the molecular mechanisms that regulate methylation of histone H3 lysine 4 (H3K4) particularly the functions of Mixed Lineage Leukemia (MLL) enzymes and their roles in cancer and developmental disorders.
- My project: Investigating the role of the Win6mer inhibitor on MLL1 target gene expression in MCF-7 breast cancer cells using qPCR.
- As part of this honors-level Capstone project I have:.
- Performed RNA extraction and cDNA synthesis.
- Conducted various qPCR experiments to measure gene expression in treated and untreated cells.
- Optimized qPCR protocol utilizing SYBR-Green and conducted troubleshooting.
- Analyzed qPCR data and prepared figures for a manuscript.

Undergraduate Intern , 01/2017 to 12/2017

- HALL LAB, BIOLOGY DEPARTMENT, SYRACUSE UNIVERSITY The Hall lab studies how early life stress affects epigenetic programming and gene expression using C.
- elegans My project: Identifying transcription factors that regulate the OSM-9 TRPV channel in the neural membrane of C. elegans using Yeast-one-hybrid (Y1H) assays.
- As part of this project I:.
- Designed PCR primers and PCR amplified and cloned genes for transcription factors used in Y1H assays.
- Conducted Y1H assays and screens for transcription factors binding to the promoter of the osm-9 gene.
- Performed DNA extraction and conducted PCR and gel electrophoresis to verify mutations in C. elegans.
- Generated and presented a poster on the project results.

#### Education

Bachelor of Science : Biotechnology Science SYRACUSE UNIVERSITY - City , State

GPA: 3.73/4.00, GPA: 3.60/4.00

#### Work History

Associate Scientist and Lab Technician , 01/2019 to 06/2019

City , STATE

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MORPHOGENESIS (STEM) LAB, BIOENGINEERING DEPARTMENT, SYRACUSE UNIVERSITY The STEM lab focuses on differentiating human induced pluripotent stem cells (hiPSCs) into cardiac myocytes and other iPSCs into mesenchymal stem cells (MSCs).

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Research Assistant , 01/2018 to 12/2018

Company Name – City , State

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- elegans.
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Interests

HONORS/AWARDS/PRESENTATIONS , Accepted into Renée Crown Honors College at Syracuse University August 2017: Awarded \$3,500 by the Undergraduate Research Program at Syracuse University Biology Department to conduct summer research

Skills

- BIOCHEMISTRY, BIOLOGY, C, cancer, DNA, ELISA, experiments, Win6, MSC, neural, novel, PCR, programming, research, transcription, troubleshooting