*August 2012 – Present*

*May 2014 – November 2014*

*April 2011 – February 2012*

*September 2015 – Present*

*October 2012 – Present*

*May 2014 – Present*

*August 2005 – June 2012*

**research Experience**

**International Genetically Engineered Machine (iGEM)**

Penn State iGEM team supervised by Dr. Howard M. Salis and Dr. Tom Richard.

Trained in various molecular and synthetic biology techniques. Worked to validate the dCas9 gene knockdown system in E. coli and P. putida to identify genes responsible for furfural toxin catabolism in biofuel production.

*Awarded Gold medal in Foundational Advances at International Competition*

**UPMC Magee-Women’s Research Institute and Hospital, Pittsburgh PA**

Senior Project Internship with Lori Hoffner, MS.

Trained to identify placental ploidy and types of molar pregnancies through FISH microscopy. Evaluated on advancement of skills and understanding of concepts in medical research.

**Academic qualifications**

**Pennsylvania State University, University Park PA**

B.S. Molecular Biology, Minor in Microbiology.

Italian Language and Culture Study Abroad, Todi Italy

* Electrocompetent cell preparation
* Transformation
* Various forms of Microscopy
* Chromatography
* Basic Skils in MATLAB and C++
* Microsoft Word, Excel, PowerPoint

**VOLUNTEER EXPERIENCE**

**Tides, Inc., State College PA**

Group facilitator creating a safe environment for families to grieve tragic losses.

**Penn State IFC/Panhellenic Dance MaraTHON, University Park PA**

2013 – 2015 Rules & Regulations Committee Member and Second in Command

2016 Dancer Relations Committee Member

TETRA FTK Special Interest Organization Member

**Network for Excellence in Undergraduate Science, University Park PA**

Student leader and Mentor for Eberly College of Science activities.

**Susan Yadamec Dance Company, Greensburg PA**

Student instructor for children ages 3 – 12.

**Professional skills and techniques**

* DNA extraction and Gel Electrophoresis
* Protein extraction and purification
* Restriction Digestion
* Polymerase Chain Reaction
* Cell Culture and Sterile Technique
* Plasmid preparation and purification

**REFERENCES**

**Mrs. Susan Yadamec-Baumgard**

770 E Pittsburgh Street, Greensburg, PA 15601

(724-396-8084)

**Mrs. Lori Hoffner, MS**

20 Glenmeade Road, Greensburg, PA 15601

(412-897-4696)

**Tom Richard, Ph.D**

The Pennsylvania State University, Department of Agricultural and Biological Engineering

225 Agricultural Engineering, University Park, PA 16802

tlr20@psu.edu

(814-865-3722)